

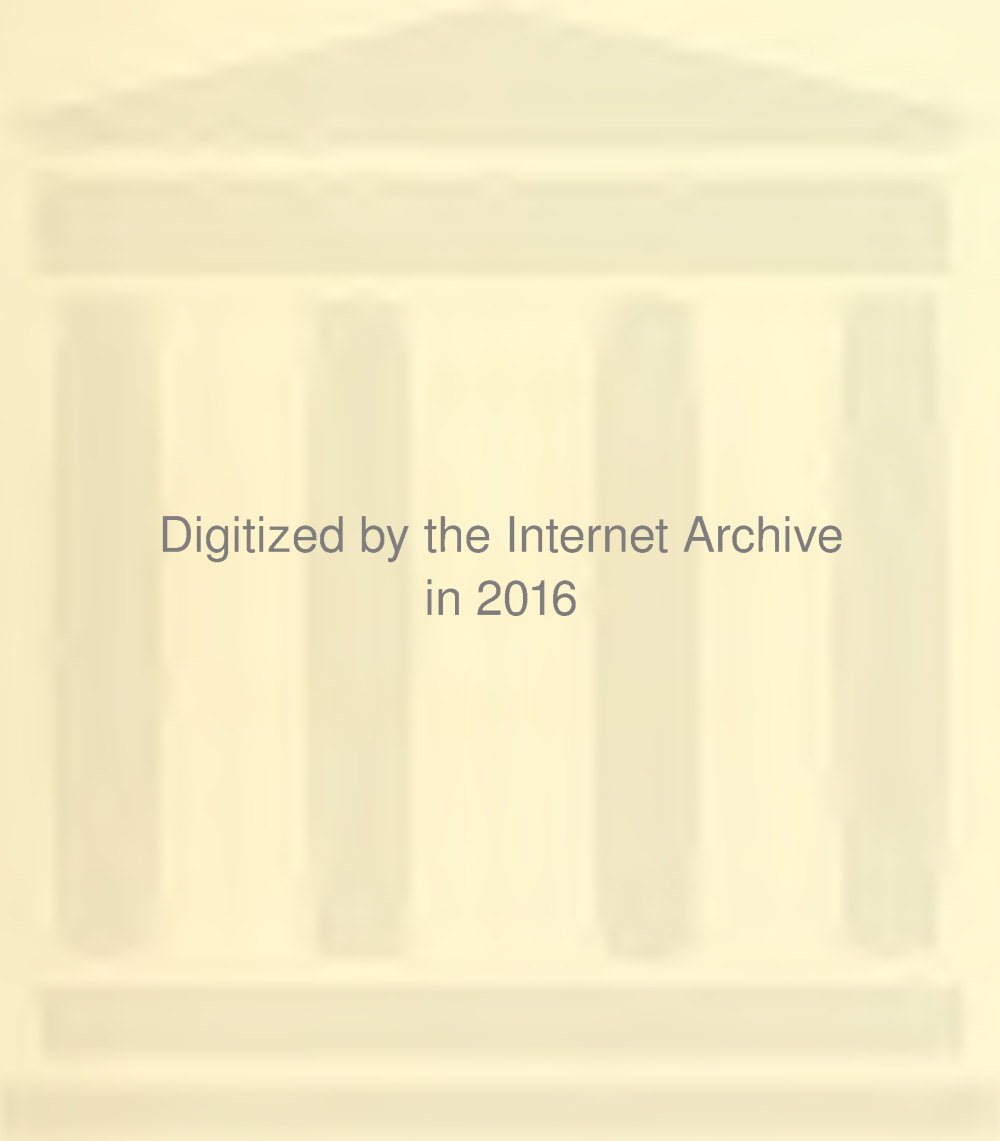
COUNTWAY LIBRARY



HC 3JFM 2

BOSTON  
MEDICAL LIBRARY  
8 THE FENWAY





Digitized by the Internet Archive  
in 2016

<https://archive.org/details/journalofsouthca5519sout>









# The Journal

of the

## South Carolina Medical Association

VOLUME LV

January, 1959

NUMBER 1

## PROBLEMS IN EDUCATION FOR GENERAL PRACTICE

HOLLAND T. JACKSON, M. D.  
Fort Worth, Texas

**T**onight I would like to spend a few minutes with you on the relationship of medical education of family physicians. Specifically I'm concerned about the educational problems created by the rapid progress we see each year in modern medicine. For the most part, this trouble is rooted in educational methods that lag behind the dynamic surge of medical advance.

It is only natural that progress will beget problems. I think you will all agree that one of the most important factors in the founding of the American Academy of General Practice was the need for continued education at the postgraduate level. It was a challenge—one that I believe has been well met. Similarly, a continuing Academy aim is to be constantly on the alert for approaching problems—to anticipate them—and to act before a situation develops.

We all know that the more we learn about saving lives and about new ways to treat human illness, the more difficult it becomes to educate family doctors. There was a time, not too many years ago, when a man could complete an education by struggling through the right books, listening to some instructive lectures and having enough self-confidence. This era ended when doctors stopped using

herb medicines and learned that the human body is a complicated piece of machinery.

At about the same time, medical education stopped being a hit-or-miss experience. We began to weed out the charlatans and fly-by-night cultists. We realized that a doctor needs years of intensive training and that he can never hope to know everything about the delicate arts of diagnosis and therapy. Some of the more enlightened educators even began to talk about preventive medicine.

Since that era, medicine has made fantastic progress. Many of you had front-row seats and have been privileged to watch this miracle. What once constituted medical learning for a father is now inadequate for his son. In particular, today's spotlight is on graduate education and the internship. As each medical advance is recorded, the internship becomes a greater block in the continuity of an educational program. It's caught in a squeeze from progress in training methods at both the undergraduate and graduate levels.

Twenty years ago, the internship was a perfect vehicle to provide the basic experience needed to supplement the academic climate of the medical school. Nowadays, the medical student is introduced to clinical work as a clerk in his third year of undergraduate study. In this capacity, he experiences the same elementary procedures that gave value to the internship.

At the graduate end of the scale, the general

---

Dr. Jackson's address was given at the Tenth Annual Assembly of The South Carolina Chapter of the Academy of General Practice—Clemson, S. C. October 9, 1958.

Dr. Jackson is President of the Academy of General Practice.

practice residency more than preempts the remaining value of interning.

Along with many Academy members who have spent countless hours studying the problem, I believe the logical solution is to combine the present undergraduate program with a two-year graduate residency. This single step would provide continuity in the education of tomorrow's family physician.

You may ask why not keep the internship and add the residency? My answer is for you to picture yourself as today's student preparing for general practice. As a clerk he is introduced to clinical work. He enters an internship—finds himself at the bottom of the ladder—and begins again. Is it any wonder that it is difficult to induce him to spend two additional years in a residency? For the third time he is faced with the necessity of starting over. Combine this with the fact that almost every graduate must complete two or more years of military service and it becomes obvious that such a program has little appeal. It's far easier for the young doctor to enter practice, even if he would prefer to have the advantage of a residency.

On the other hand, here are some advantages offered by a two-year general practice residency when combined with four years of undergraduate work.

1. The residency offers a program designed to fit the demands of medicine in 1958, not 1932.

2. It allows the young physician a chance to grow in both responsibility and status as he learns.

3. Practicing as a hospital resident gives the modern graduate a needed opportunity to prove his ability. Once this is done, it is more likely that he will have the hospital facilities available to him when he enters private practice. Practice in a hospital provides associations with other physicians and an opportunity for study and for consultation with more skilled or experienced colleagues. All these factors are essential to continued advancement in the art and science of good medical practice. What would this residency program include?

At least three Academy commissions and committees are vitally interested in this question. The newest of these groups is the Com-

mittee on Minimum Uniform Standards of Education for General Practice, better known as the "MUSE" Committee. Members of this committee include the chairmen of three commissions:

The Commission on Hospitals  
The Commission on Education  
The Commission on Membership and Credentials.

The Academy's representative on the General Practice Residency Review Committee is also on one of the nine MUSE members. Others include Academy representatives to the AMA's Committee on Preparation for General Practice.

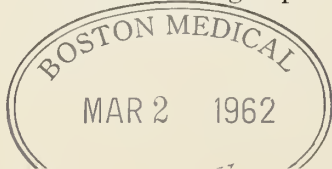
These men, with their combined knowledge, experience, and study, offer the following recommendations:

The first year of a two-year residency should replace the internship. This experience would be educationally superior and would start as soon as the graduate receives his medical degree. The residency would conform with the *Essentials of Approved Residencies and Fellowships* published by the AMA's Council on Medical Education and Hospitals.

The first year of this residency should stress the diagnostic, therapeutic, psychiatric, preventive and rehabilitative aspects of general medicine and pediatrics. This would give the young doctor a base for further graduate training if he decided to specialize. The training received would be acceptable to all specialty boards and licensing agencies. Considerable emphasis would be placed on treating ambulatory patients.

The second year of the residency would provide four months of training in obstetrics and gynecology and four months of surgical training. The remaining four months would be left open for electives. If the general practice resident wants to do major surgery or handle the more complicated obstetric cases, he would need additional graduate training. However, the two-year residency would enable him to do minor and emergency surgery.

During these two years, the general practice resident would spend a considerable amount of time in the hospital emergency room. His surgical training would emphasize diagnosis as well as preoperative and postoperative care.



Every surgeon should be qualified and prepared to handle the pre and postoperative care of his patient.

For a moment I'd like to depart from the MUSE Committee sentiments and highlight a few personal convictions. It might be that four additional months of surgical training could replace the four elective months. With eight months of training, the resident should be qualified to do limited major surgery. He could then go into practice and be given an opportunity to prove his ability and work into a surgical training sponsorship plan.

The Academy is not alone in its awareness of the growing problems in education for general practice. There are many examples of others who see the growing need for changes in the educational structure to meet the enlarged demands of medical knowledge.

For example, look at the medical schools. Last year, 31 schools conducted special programs to give the student actual experience in clinical practice under supervision. Included were preceptorships with general practitioners, general medical clinics, and family care programs. More than one-half of the medical schools in the United States include family physicians on their teaching staff. This could be increased if there were more qualified general practitioners interested and willing to devote time to instructing and supervising students. Academy members have a tremendous responsibility to lead the way towards even greater participation.

Look at organized medicine. Through the combined action of the Academy and the American Medical Association the "Essentials of an Approved General Practice Residency" have been revised and expanded. A special residency review committee also has been established with representatives from the Academy and the AMA's Council on Medical Education and Hospitals.

The record speaks well, too, for hospitals and students planning to enter general medicine. There has been a steady increase in the number of programs and the quality of residencies. In 1955 there were 168 hospitals offering 638 positions in approved general practice residencies. Last year this number was up to 204 hospitals and 802 approved

positions. Today, approximately 70 per cent of these positions are filled. Three years ago only 55 per cent were used.

Another indication of the increased interest in graduate training is the growing number of applicants for the Academy's Mead Johnson Awards. In the past, a grant made available by Mead Johnson & Company was presented to 10 outstanding young men as assistance towards the completion of a general practice residency. So great was the interest last year that the 1959 grant will make it possible for the Academy to provide financial aid to twenty young physicians during their graduate training period.

I think you will agree that these examples all point to a trend away from the internship.

I mentioned earlier that residencies provide a needed continuity to education. With this in mind, I also strongly endorse in-hospital sponsorship programs designed to further supplement the physician's education. Not only should the doctor have an opportunity to demonstrate his abilities and skills, he should have a chance to improve himself professionally.

Sponsorship programs should give the younger staff member the benefits that go with experience and can be readily passed along. The programs should be designed to let the staff evaluate the applicant's previous graduate work and offer additional training as a result of practicing under the guidance and direction of senior staff members. Through the close association inherent in this type of program, the sponsor can advantageously not only determine the technical ability, but the clinical judgment, professional maturity and ethical and moral responsibility exhibited by the young doctor.

And there is an additional advantage—a most important one. No time limits and rules automatically determine when a man becomes proficient. No patent formula steps in the way to say that this graduate is not qualified to handle a procedure today that he will be qualified to handle tomorrow. *Judgment is based on individual ability.*

I do not like to build castles in the air. I am keenly aware that there are many difficulties encountered in the establishment of



working sponsorship programs. Many will argue that it is not practical for the qualified, finished doctor—the doctor who has spent time and money for his know-how, to sponsor a program which will increase competition.

I think the AMA placement bureau figures on available openings for general practitioners aptly answer the question of competition. Today there are two positions waiting for each family physician seeking a location.

As far as offering help to another, that is a question each among you must settle for himself. Look back over your own career and I'm sure you can think of several who extended their fund of experience and knowledge to you when it was most needed.

The thought I have just expressed is equally applicable to preceptorship programs. I would like to elaborate on this important area. The preceptorship is a living link between medical school and the practice of medicine. It's an invaluable part of the doctor's total education. Only in-the-field programs let the young physician compare general practice with the many specialties. For the first time, he sees the patient as a person and as a living, breathing organism.

The key to the successful program is the preceptor. He must be a teacher, counselor and friend. He must want to learn as well as teach.

He will at times find it difficult to keep ahead of his student who comes filled with new educational concepts and the latest his professors have to offer. This is a challenge but it is also a deeply rewarding experience. In a few weeks or months, the student learns that a doctor must be more than a competent clinician. He learns that medicine is more than a science or technique. I think that the planned preceptorship is one of the most important parts of the doctor's education.

I conclude with the hope that each of you here tonight will be more than just aware of problems confronting us in medical education. As physicians you have a challenge to take active part in preceptorship or sponsorship programs. As members of hospital medical staffs you can work towards establishing the general practice residency in the place of outdated internships. Keep up with the times. Prepare a positive program and you will have the earned respect of the profession and the public. This is a problem that can only be solved by the continued determination on the part of all physicians. We can't eliminate it by hiring a high-priced public relations agency. It's a problem that was born in our offices, medical schools and hospitals and it must be solved in these same atmospheres.

---

*Therapeutic Skin Washing in Seborrhea and Acne Vulgaris.* Kathleen A. Riley, M. D. (Charleston) Medical Times 86:973, August, 1958.

The value of therapeutic washing of the skin and scalp with a new surface active combination of detergent and wetting agents, formulated along with well-known, clinically proven drying and keratolytic ingredients has been evaluated in the treatment of seborrhea capitis and of acne vulgaris.

In fifty-seven out of sixty patients having seborrhea capitis significant improvement was obtained with the use of Fostex Cream shampoos.

Washing of the skin with Fostex Cream or Cake, as an adjunct to the usual treatment routine, contributed toward the amelioration of acne vulgaris in one hundred and forty-seven out of one hundred and fifty patients. These individuals had previously failed to respond to the same acne treatment regimen when the skin was washed with ordinary soap.

Sustained patient cooperation and acceptance of the therapeutic regimen were outstanding, and reflect the importance of thorough patient orientation and simplicity of methods of treatment in the therapy of these conditions.



# EXPERIENCES WITH THE ARTIFICIAL KIDNEY

## AT THE MEDICAL COLLEGE HOSPITAL

C. M. SMYTHIE,\*<sup>\*</sup> A. V. WILLIAMS,\*<sup>\*\*\*</sup> AND JOHN BUSE\*<sup>\*\*\*\*</sup>  
Charleston, S. C.

Extracorporeal dialysis in the treatment of acute renal failure has been used clinically for more than 10 years.<sup>1</sup> A coil dialyzing unit originally devised by Inouye and Engelberg and recently modified by W. J. Kolff<sup>2</sup> has been in operation at the Medical College Hospital since March of 1957. The purpose of this paper is to summarize the experience gained from sixteen dialyses of eleven patients and to report one unusual case.

The operation of the apparatus has been described elsewhere.<sup>2</sup> It was chosen from the models available because of its relative simplicity. In addition the coils and all accessory tubing and filters are available from a manufacturer packaged and sterilized. The unit is also relatively small. Its major disadvantage lies in the high resistance in the unit and the necessity for maintaining unphysiologically high pressures in it to achieve adequate rates of flow through the coil. The dialyzing area is large enough to obtain urea clearances of 78 to 130 ml/min. provided adequate perfusion rates are maintained.

Although multiple technical difficulties are met in the operation of the unit, it has appeared to us that these are less than with other effective pieces of equipment. Eighteen thousand square cm. of dialyzing surface are available in two coils wrapped in fiberglass mesh. Blood is perfused through the coils which are suspended in a 100 liter bath which is circulated over the coils. The composition of the bath is set out in Table I.

The most frequent indication for hemodialysis is acute renal failure, regardless of its origin (Table II<sup>3</sup>). Less frequent indica-

tions are chronic renal failure, acute poisoning, especially following the ingestion of large doses of salicylates or one of the long acting barbiturates, and rare miscellaneous causes. In chronic renal failure the major indication is to help a well stabilized chronic uremic patient through a period of stress such as an operation, injury or infection.

TABLE I  
COMPOSITION OF DIALYZING FLUID (BATH)

Component	mEq/l.
Sodium	133
Bicarbonate	36
Potassium	5
Calcium	5
Magnesium	3
Chloride	110
pH 7.4	
Dextrose 400 mg./100 ml.	
Temperature 38°C	

The only contra-indication to dialysis is the presence of a potential source of bleeding, especially in the central nervous system, the gastrointestinal tract, or a wound. The necessity for heparinization makes such a potential bleeding point hazardous.

Patients admitted to the Medical College Hospital with acute renal failure are placed on conservative medical management. In essence, this consists of (a) rigid restriction of all fluids to less than a liter a day, (b) total restriction of all proteins, potassium, and usually sodium, (c) the provision of a minimum of 100 grams of carbohydrate a day. On this regimen, in the absence of rapid breakdown of tissues, an oliguric or anuric patient can frequently survive until healing of the renal injury and spontaneous diuresis occurs. However, in a few patients the occurrence of severe hyperkalemia and symptoms of uremia indicate the necessity for dialysis. Of these, the most pressing indication is hyperkalemia. This may manifest itself either as a high blood level, as electrocardiographic changes, or as

\*Supported by the Saul Alexander Fund and a grant from the South Carolina Heart Association.

\*\*Assistant Professor and John and Mary R. Markle Scholar in Medicine.

\*\*\*Assistant Professor of Medicine.

\*\*\*\*Associate in Medicine.

profound weakness. A less definite but equally serious indication is an increasingly severe uremic syndrome. By this is meant acidosis,

TABLE II  
A PARTIAL LIST OF CAUSES OF ACUTE RENAL FAILURE

(1) Shock	hemorrhage wounds and surgery crushing injuries burns
(2) Hemolysis	transfusion reaction intra-vascular distilled water
(3) Infection	pyelonephritis "hepatorenal syndrome" septic abortion
(4) Hypersensitivity	acute glomerulonephritis polyarteritis lupus erythematosus
(5) Obstruction	obstruction of ureters intra-renal obstruction with urates or sulfonamides
(6) Vascular	bilateral cortical necrosis renal artery thrombosis or embolism dissecting aneurysm
(7) Nephrotoxins	bichloride of mercury carbon tetrachloride sulfonamides phosphorus
(8) Water and electrolyte loss	diarrhea vomiting intestinal suction excessive diuretics

vomiting, tetany, pericarditis, and stupor. Convulsions may also be an indication for dialysis. As confidence in units of this type has increased it has become evident that hemodialysis is safe and less traumatic than allowing a patient to become severely uremic. Characteristically, most patients are in severe enough difficulty to need dialysis after ten days of anuria. In the group who are post-partum or who have their renal injury subsequent to some major trauma, this period is usually shorter.

Selected from a large group of patients with acute and chronic renal failure admitted to the Medical College Hospital in the past year, 11 patients have been treated by 16 hemodialyses. (Table III.)

TABLE III

Indication	Patients	Dialyses	Survived
acute glomerulonephritis	4	7	1
transfusion reaction	1	1	1
tubular necrosis secondary to shock	2	2	1
hepatorenal syndrome	1	3	1
scleroderma	1	1	0
chronic uremia	2	2	2
	11	16	6

It is immediately apparent that some patients were dialyzed more than once. Although most tubular necrosis will heal in 8 to 12 days, some patients may go 21 to 36 days before enough regeneration has occurred to prevent the development of uremia. Also, as exemplified in the following detailed case report, development of hyperkalemia or uremia may be so rapid that dialysis may be necessary at frequent intervals.

A 34 year old Negress (MCH #12901) was transferred to the Medical College Hospital from the U. S. Naval Hospital, Charleston, on Jan. 8, 1958 because of anuria. She had been admitted to the Naval Hospital five days before in a stuporous condition. No history was available save what little could be gleaned from her. She was seven months pregnant (gravid VII, para IV). One month before admission there were symptoms of lower urinary tract infection for which she had been treated with Azo Gantrisin (Sulfisoxazole and Phenylazo-Diamino-Pyridine-HCL) for one week. The night before admission she had evidently had a seizure. Following this she became stuporous and accordingly was sent to the hospital. There was no history of an attempt to induce criminal abortion.

She was found to be a stuporous Negress who responded vaguely to questions. Her blood pressure was 200/110 mm. Hg., her pulse 114/min. She was afebrile. The sclerae were icteric. There was old blood in the mouth. The mucous membranes were pale. The arterioles of the ocular fundi showed diffuse and segmental spasm, but no exudate or hemorrhage. The heart could be felt 11 cm. lateral to the midsternal line. The liver and spleen were not palpable. An enlarged uterus filled the abdomen. No localizing neurological signs were present.

Her hemoglobin was 7.6 grams/100 ml., white count 10,300/cmm. with 59% polymorphonuclear cells, platelet count 40,000/cmm., reticulocyte count 2.4%, serum bilirubin 6.1 mg./100 ml., prothrombin time 39% of normal. Blood urea nitrogen (BUN) was 16 mg./100 ml., serum sodium 140 mEq./l., potassium 6.6 mEq./l., and carbon dioxide combining power 30 volumes %. The urine was black and contained no bile. Urobilinogen was present in a dilution of 1:160, and free hemoglobin was present in the supernatant fluid. The urinary sediment was normal.

The initial diagnosis was toxemia of pregnancy. She was placed on intramuscular magnesium sulfate. During the first eight hours in the hospital she passed only 120 ml. of urine, which was as described above. Subsequently the urine became loaded with red blood cells. Because of her apparent hemolytic anemia, she was started on adrenocorticotrophic hormone (ACTH) 50 units intramuscularly daily, and was given 2 units of packed red blood cells. Three days after admission to the hospital she delivered spontaneously a stillborn

infant after an easy and brief labor. However, she remained oliguric, became increasingly jaundiced, and progressively more stuporous. The BUN rose to 101 mg., and the serum potassium to 7.2 mEq./l. Also her reticulocyte count rose to 6.3%. Because of increasing uremia and the rise in her serum potassium she was admitted to the Medical College Hospital on the fifth day of her illness for consideration for hemodialysis. During the three days before transfer she had passed about 50 ml. of urine a day.

On admission she was a lethargic and confused woman lying flat in bed, unable to give a history. Her blood pressure was 160/100, Temp. 98.6°, pulse 84. The sclerae were deeply icteric. The ocular fundi were as previously described. The gums were bloody, and the breath foul. The heart was in the 6th intercostal space, 2 cm. beyond the mid-clavicular line. The abdomen was soft and distended, the liver and spleen not palpable, the uterus well contracted, the bowel sounds distant and high pitched. There was foul smelling lochia draining from the vagina. Rectal examination was negative. No localizing neurologic deficit was apparent.

The hemoglobin was 11 grams, the white blood cell count 32,000/cmm. with 87% polymorphonuclears, platelet count 81,000/cmm., reticulocyte count 7%, serum bilirubin 20 mg., BUN 75 mg., serum potassium 5.1 mEq./l., sodium 131 mEq./l., chloride 94 mEq./l., and CO<sub>2</sub> 44 volumes %. The urine was loaded with red blood cells, contained 4+ albumin, and a 4+ reaction for bile. There was hemoglobin in the supernatant fluid.

The initial diagnosis was hepato-renal syndrome, presumably secondary to an eclamptic state. Parametritis was also suspected. She was treated with 750 ml. of 15% dextrose in water, and 60 units of intravenous ACTH daily. She was given 20 units of regular insulin before each intravenous infusion. Her condition deteriorated over the next three days, and on the eighth day from the beginning of her illness she was nearly comatose. Blood potassium was 7.3 mEq./l. The electrocardiogram showed definite changes of hyperkalemia. She was dialyzed for five and one-half hours on that afternoon. (Table IV).

TABLE IV  
BLOOD CHEMICAL VALUES BEFORE, DURING,  
AND AFTER FIRST DIALYSIS, 1/11/58

	3:50 P. M.	6:40 P. M.	9:10 P. M.
Hematocrit reading (%)	34	36	33
Blood urea nitrogen (mg.)	198	135	111
Serum phosphorus (mg.)	8.6	7.5	6.8
Blood creatinine (mg.)	14.6	11.6	10.5
Carbon dioxide combining power (vol. %)	36	51	56
Serum chloride (mEq./l.)	76.6	80.2	78.8
Serum sodium (mEq./l.)	121	127.6	144
Serum potassium (mEq./l.)	7.3	6.0	5.4

She did not respond to this dialysis well. Her sensorium remained dull. She continued to ooze from many sites after a small dose of heparin. However,

the electrocardiogram reverted to normal, and blood chemical values were more normal. She was started on penicillin.

Forty-eight hours later, or on the 10th day of her illness, she was again in critical condition, with a potassium of 7.7 mEq./l., and a BUN of 179 mg. She remained oliguric and as jaundiced as ever. An electrocardiogram showed hyperkalemic effects again, and the reflexes were hypoactive. She was dialyzed a second time that afternoon. (Table V).

TABLE V  
BLOOD CHEMICAL VALUES BEFORE, DURING,  
AND AFTER SECOND HEMODIALYSIS JAN. 13

	4:00 P. M.	7:00 P. M.	10:45 P. M.
Hematocrit reading (%)	27	30	29
Blood urea nitrogen (mg.)	179	117	89
Serum phosphorus (mg.)	12.5	8.8	9.4
Blood creatinine (mg.)	13.8	10.0	8.3
Carbon dioxide combining power (vol. %)	38	51	61
Serum chloride (mEq./l.)	78.3	80.2	80.2
Serum sodium (mEq./l.)	127	141.3	135
Serum potassium (mEq./l.)	7.7	5.6	5.1

Once again the electrocardiogram reverted to normal, but she was hypotensive during most of this procedure. She had less oozing than two days previously and required more heparin to prevent clotting in the extracorporeal tubing. The next morning her sensorium was clearer, she was less icteric, and her condition was definitely improved. Over the next four days her urine output increased slowly from 15 to 275 ml. per day. Her serum bilirubin fell from 21 to 15.3 mg., and her white blood cell count fell from 53,600 to 39,600/cmm. However, she once again became hyperkalemic. A profuse, foul discharge from the vagina continued. On the evening of the 14th day a decision was made to dialyze her for the third time the following morning.

Early the next morning she was found to be comatose. An electrocardiogram (Figure 1) showed very far advanced hyperkalemic effects. The serum potassium was 9.5 mEq./l. She was immediately given 35 ml. of 50% dextrose, 30 units of regular insulin, and 200 ml. of 3% saline intravenously. Serum potassium dropped to 7.9 mEq./l., and the electrocardiogram showed some improvement but remained grossly abnormal. Immediate preparations were made for dialysis. (Table VI)

TABLE VI  
BLOOD CHEMICAL VALUES BEFORE, DURING,  
AND AFTER THIRD HEMODIALYSIS 1/18/58

	9:30 A. M.	1:30 P. M.	4:45 P. M.
Hematocrit reading (%)	23	26	26
Blood urea nitrogen (mg.)	205	140	98
Serum phosphorus (mg.)	22.8	12.4	9.5
Blood creatinine (mg.)	15.4	10.3	7.6
Carbon dioxide combining power (vol. %)	14	34	43
Serum chloride (mEq./l.)	77	85	83
Serum sodium (mEq./l.)	120	130	130
Serum potassium (mEq./l.)	7.9	4.1	3.3



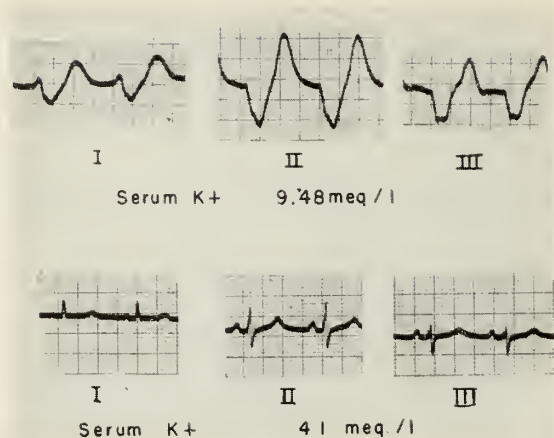


Figure I.

The upper tracing shows marked effects of hyperkalemia. Note the absent P-waves and the widely spread QRS complexes. The lower tracing has returned to normal after three hours of dialysis.

This six hour procedure was marked by many difficulties, both technical and in maintaining the patient's blood pressure. However, blood chemistries improved once again, and the electrocardiogram reverted to normal in three hours. (Figure I).

The following morning she was clear mentally, asked for something to eat and looked improved in every way. That day she passed 650 ml. of urine. Her convalescence continued slowly and uneventfully thereafter. Her jaundice cleared completely. Her hemolytic process cleared. Her blood chemical content returned toward normal. Her pelvic infection improved, and her appetite slowly returned. She was discharged from the hospital on the 31st hospital day, 36 days from the beginning of her illness, to continue her convalescence at home.

Six months later she was normotensive with no anemia, a normal blood urea nitrogen, and a clear urine. She was successfully caring for her children. Her only complaint is a slightly tender keloid in the scar from one of the arterial cutdowns.

### Discussion

After the Medical College Hospital acquired a hemodialyzing unit, the primary concern was to find answers to a number of major and minor technical problems. These were successfully ironed out by practice experiments using dogs. Details of patient management again became the first concern. It was apparent that careful attention to fluid and electrolyte balances, close attention to electrocardiographic changes, and the frequent use of consultants were essential. The major problem has been over-loading these patients with fluid and sodium despite rigid fluid restriction. In an

air-conditioned building or in winter 600 ml. of fluid per day will usually provide sufficient hydration for the anuric individual. This is especially true since many of these patients are already over-hydrated by the time it is realized that they have acute renal failure. The administration of 100 grams of carbohydrate a day may be difficult. Nausea and vomiting are major problems, and veins are at a premium. For as many days as possible the fluid and calorie ration is prescribed by mouth. The use of antiemetics such as promazine hydrochloride (Sparine) or prochlorperazine (Compazine) and careful attention to icing and flavoring of fluids frequently make oral feedings possible.

Timing of dialysis remains a recurrent problem. At first this group tended to wait until patients were in desperate condition. As experience became greater dialysis has been resorted to even when not immediately and urgently indicated. For example, a 15 year old boy was dialyzed for only three hours for the second time the 16th day after the onset of anuria from acute glomerulonephritis. This was done at the beginning of his diuresis to alleviate distressing symptoms of severe uremia. After a stormy illness he is now doing well, although left with chronic nephritis. On the other hand, after a transfusion reaction a young woman had become severely uremic by the 11th day when diuresis began. She remained very seriously ill, however, and did not recover sufficiently to be discharged from the hospital until 26 days following the onset of diuresis. In retrospect, her illness may have been shorter and less debilitating had she been dialyzed on her 8th or 9th day.

In contradistinction to preliminary expectations, diagnosis has remained a major problem in these cases. Not only has it been difficult to judge the exact etiologic agent causing acute anuria but even whether a patient has acute renal disease or not. Those cases of acute renal failure following acute trauma are simple enough to diagnose. However, in post-partum patients the differential diagnosis between tubular and glomerular injury may be difficult. This is of vital importance, for severe glomerular destruction is essentially irreversible.



In the so-called medical cases equally great difficulties arise. The need for a clear cut history is of paramount importance in establishing the presence or absence of preexisting renal disease. Eyeground changes, heart size, cardiac contour, electrocardiographic changes may help in differentiating an exacerbation of chronic renal disease from a case of acute renal disease.

Careful clinical judgement is necessary in evaluating the speed of progression of uremia. Hyperkalemic changes can develop quite suddenly. In our experience the appearance of convulsions has been a most ominous sign.

Another problem is to judge whether a renal lesion is reversible. Percutaneous needle biopsy of the kidney as used in Sweden is helpful. However, this procedure has been avoided in this country due to fear of bleeding should heparinization become necessary for dialysis shortly after biopsy.

Of four cases with acute glomerulonephritis who were dialyzed, two had irreversibly destroyed kidneys. The following case illustrates this hopeless prognosis in spite of dialysis.

A 19 year old produce market worker first noted bloody urine about three weeks following a sore throat. The urine volume became scant, and urine formation finally ceased ten days after the onset of hematuria. He was thought to have glomerulonephritis. On conservative therapy he did well. He was first dialyzed because of a severe uremic state 19 days after the onset of hematuria and after nine days of complete anuria. The dialysis was successful. Blood urea nitrogen dropped from 192 mg. to 106

mg., and the carbon dioxide combining power rose from 30 to 50 volumes per cent. He remained anuric, and eight days later he was again electively dialyzed. This procedure was again uneventful, and his blood urea nitrogen dropped from 207 to 109 mg., and carbon dioxide combining power rose from 30 to 49 volumes %. He remained anuric and uremic for eleven more days until he died suddenly of pulmonary embolism on the morning when a third dialysis was scheduled. His death occurred 38 days after the onset of his disease and after 28 days of complete anuria. At autopsy he was found to have acute glomerulonephritis with obliteration of all his glomeruli. With two hemodialyses he had been kept alive long enough to have his disease heal if it were going to. Further dialyses would not have improved his prognosis.

### *Summary and Conclusions*

(1) The Kolff disposable dialyzing unit has proven to be a servicable and practical apparatus.

(2) Eleven patients have been dialyzed in the Medical College Hospital. Six patients have survived. Four of these had acute renal failure and all four are at present doing well. Of the five who died, three were examined by autopsy and were found to have irreversible kidney disease.

(3) Problems in the management of these patients are discussed.

### REFERENCES

1. Kolff, W. J. and Berk, H. T. J.: Artificial kidney dialyzer with great area. *Acta Medica Scandinavica* 117: 121, 1944.
2. Kolff, W. J., Watschinger, B., and Vertes, V.: Results in patients treated with the coil kidney (disposable dialyzing unit). *J.A.M.A.* 161: 1433, 1956.
3. Merrill, J. P.: *The treatment of renal failure.* New York, Grune and Stratton, 1955.



# THE TREATMENT OF THERMAL BURNS

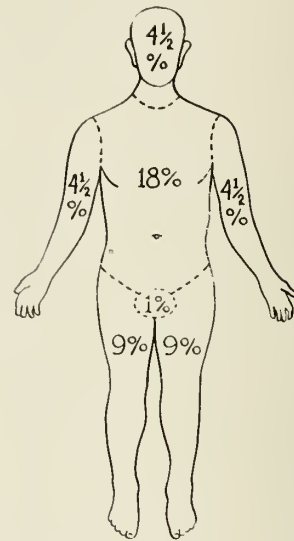
ROBERT F. HAGERTY, M. D. AND W. H. LEE, JR., M. D.\*  
Charleston, S. C.

The treatment of thermal burns is a problem of great magnitude for which there is at present but a partial solution. The scope and complexity of the problem, however, do not justify a casual approach to the handling of these patients because this can only result in additional suffering, financial loss, disability, and permanent disfigurement. Francis D. Moore, Professor of Surgery at Harvard, points out that too often a doctor will say, "It's just a matter of taking care of the patient until it's time to graft, and then I'll call in a plastic surgeon."<sup>1</sup> He emphasizes that this results after two weeks in chronic anemia, avitaminosis, high fever with secondary infection, wounds not surgically prepared for debridement and grafting, and a frightened demoralized patient in constant pain and general ill health. Many patients who could be completely healed within three or four weeks by vigorous and persistent treatment are seen occupying hospital beds for months and even years. It is most important that energetic and aggressive treatment be initiated immediately and that the closure of this open wound be attained as soon as possible, eliminating a long period of chronic infection and debilitation.

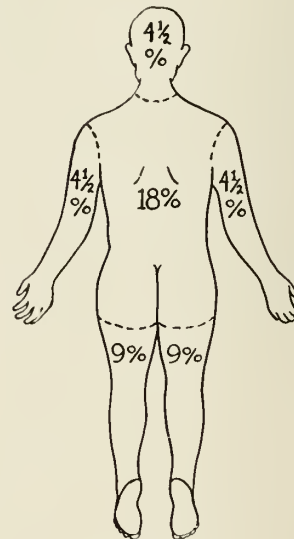
The seriousness of a burn, apart from the specific anatomy involved and the state of health of the patient, depends upon two principle factors, (1) the surface extent, and (2) the depth of the burn. The surface extent can be estimated according to the rule of nines expressed in percentage of total body area.<sup>2</sup> (Figs. 1 and 2)

Much has been written on the subject of the fluid and electrolyte therapy of extensively and acutely burned patients. For detailed discussions of the complex facets of these problems, the reader is referred particularly to the prolific writings of Moore,<sup>1</sup> Cope,<sup>5</sup> Moyer,<sup>8,9</sup> Evans,<sup>6</sup> Artz and Reiss.<sup>10</sup> For the sake of

\*Department of Surgery (Plastic Surgerv), Medical College of South Carolina.



ANTERIOR



POSTERIOR

Figures 1 and 2

*Division of total body surface area according to the "Rule of Nines".*

brevity and clarity, the following discourse is based upon the authors' experience and is presented as a regimen which is both clinically successful, yet usefully simple.

The handling of a severely burned patient may be divided into three basic phases of treatment.

- a) Acute phase—emergency treatment of shock, general supportive measures, and aseptic care of the wound.
- b) Intermediate phase—maintenance of nutrition, electrolyte balance, and general supportive measures.
- c) Definitive phase—definitive surgical preparation and grafting of the burned areas.

#### ACUTE PHASE (DAYS 1-3)

In the immediate care of the burn, the following procedures must be attended to:

1. History, physical examination, weighing of patient, and estimation of extent and depth of the burn.
2. Sedation, by intravenous route in severe cases because of poor absorption from the subcutaneous route in circulatory deficiency.
3. Procurement of blood sample for laboratory studies and cross matching through venipuncture followed by initiation of fluid therapy.
4. Insertion of polyethylene catheter in vein for prolonged fluid therapy.
5. Insertion of a Foley catheter into the bladder.
6. Administration of antibiotics and tetanus prophylaxis.
7. Initiation of fluid intake and output charting.
8. Performance of tracheostomy if damage to the respiratory tract is suspected as indicated by hoarseness, rales, coughing, rapid respirations, or cyanosis.
9. Insertion of a naso-gastric tube with continuous aspiration to relieve gastric dilatation, abdominal distension and vomiting in severe burns.
10. Cleansing of burned areas and application of sterile dressings.

Fluid therapy is given in direct proportion to the extent of the burn. As a result of tissue injury by exposure to high temperatures, vasodilation and increased capillary permeability give rise to edema. Vasodilatation is also associated with increased capillary hydro-

static pressure which, coupled with the increased capillary permeability, results in a shift of plasma proteins into the interstitial spaces of the injured tissue, lowering the osmotic pressure of the plasma. In this way edema increases until limited by tissue tension. In short, one may visualize the burned area as a sponge absorbing quantities of plasma from the circulating blood volume. This sponge-like effect is in direct proportion to the three-dimensional volume of the burn. The nature of fluid, plasma, protein, and electrolyte shifts have been extensively studied and discussed by Cope and Moore,<sup>3,4,5</sup> Evans,<sup>6</sup> and others. Further loss of erythrocytes and plasma into the interstitial space results from spontaneous reversible and irreversible intravascular agglutination (sludging) secondary to the application of heat to vascular channels.<sup>7</sup> Intensive intravenous therapy is usually required only in burns of more than 20% of the body surface in adults (10% in infants, and elderly or debilitated people). The successful early treatment of burns depends upon a reasonable estimate of the extent of the burn and the immediate prevention of shock by restoring to the circulation the fluids lost in the burned area.

In general, the clinical response of the patient to therapy functions as a guide in the modification of the formula. The major factors which must be considered are the blood pressure, the urinary output and specific gravity, and the hematocrit reading or hemoglobin. In regard to these major factors certain maxims aid in judging the adequacy of fluid therapy.

1. The urinary output is measured at hourly intervals and should be 25 to 50 ml. per hour for the first 48 hours in the adult. An output of over 100 ml. per hour indicates excessive intravenous replacement therapy.
2. If blood pressure and urinary output decrease, regardless of hematocrit or urinary specific gravity, increase in colloid administration is indicated; if necessary, the entire 24 hour calculated volume may be given in 12 hours, drawing upon the next day's supply to complete the first 24 hour period.



3. If the blood pressure is normal but the hematocrit reading is elevated, the urine output scanty (less than 25 ml. per hour) and unduly concentrated, then water or saline should be administered. If, however, the urinary specific gravity is low in such circumstances, organic renal complications or primary renal disease should be promptly suspected and investigated.
4. If oliguria persists organic changes producing renal failure must be considered and the fluid intake reduced.

On about the third post-burn day, there is a rapid return of the extracellular fluid into the general circulation as if the "sponge" were suddenly compressed. Therefore, fluid therapy is limited to replacement of the insensible loss and urinary output. If fluids are given in excessive amounts during the first two days, such an outpouring of fluids into the general circulation can result in pulmonary edema, especially in the young and the debilitated. This fluid mobilization stage is characterized by its diuretic manifestations.

Fluids are restored in accordance with a formula such as that of Evans:<sup>6</sup>

*Colloids* (whole blood): 1 ml. per kilogram of body weight for each percent of body surface burned in the first 24 hours.

*Electrolytes* (physiological saline solution): 1 ml. per kilogram of body weight for each percent of body surface burned in the first 24 hours.

*Nonelectrolytes* (5% dextrose in water): Minimal daily requirement, 2,000 ml. for an adult.

One-half of the fluid volume for the first day is usually given during the first eight hours. Half of the amounts of colloid and electrolytes given during the first 24 hour period is usually administered during the second 24 hour period.

A total of ten liters of fluid is never surpassed in one day's therapy. Calculation of fluids for a 50% burn is set as an arbitrary maximum. The formula is used only as an initial guide to management, being modified as needed by the clinical response of the patient to therapy. Colloid and electrolyte ad-

ministration should be restricted to less than the calculated amount when there is significant pulmonary involvement because of the hazard of pulmonary edema. In addition, extra precautions must be taken in the administration of the electrolytes to patients with known cardiac or renal disease.

The dept of the burn is expressed in degrees: (See Next Page)

#### INTERMEDIATE PHASE (DAYS 4-8)

The primary concern of this stage of therapy is the initiation of a program of adequate alimentation. The essential features of such a program may be outlined as follows:

- a. Whole blood transfusions — given as needed to maintain serum proteins and hemoglobin at normal levels.
- b. Iron — in dosage of .3 Gm. of the ferrous salt three times daily.
- c. Water-soluble vitamins — parenterally or orally, in the following dosage schedule:<sup>11</sup>

Ascorbic acid — 1000 mg/day  
Thiamin — 50 mg/day  
Riboflavin — 50 mg/day  
Nicotinamide — 500 mg/day

- d. Caloric intake — 50 to 70 calories per kilogram of body weight per day. Approximately 2-3 Gm. of protein per kilogram of body weight should comprise a portion of the total calories. The basal metabolism is elevated following extensive thermal trauma to +30 to +60 for as long as two months after the injury, thus necessitating an unusually high caloric intake to prevent body wasting.<sup>12</sup>

In severe burns, nothing is given by mouth for the first 48 hours. If the patient can take oral feedings at the end of this time, the oral route is preferred for both fluid and nutritional requirements. If the patient cannot tolerate oral feeding because of gastric atony or intestinal ileus, the caloric schedule may be adequately met for limited periods by utilizing intravenous alimentation, including 10% dextrose, intravenous Lipomul, and amino acid solutions. At no time should oral food concentrate be pushed to the point of anorexia or nausea.



## DEGREE OF BURNS

### FIRST DEGREE

### SECOND DEGREE

### THIRD DEGREE

Hyperesthesia with erythema	Hypesthesia with blisters, blebs, partial skin thickness loss with viable islands in deeper dermal layers and skin appendages.	Anesthesia with chalky or charred full thickness skin loss; no viable islands in the deeper dermal layers and skin appendages.
-----------------------------	--	--

### DEFINITIVE PHASE (9th DAY TO COMPLETE HEALING)

The treatment of the open wound is the single most important factor in the rehabilitation of the patient. Our method of therapy is based upon several considerations. As a result of exposure to abnormally high temperatures, some epithelial cells are dead, some are damaged, and the remainder are viable. What the proportion of these three categories may be is frequently difficult to estimate accurately at the first examination. The cells necrotized by the burn form an excellent medium for bacterial multiplication. The infectious process overwhelms the damaged cells and brings the normal progress of epithelialization to a halt. An example of the progressive destruction of viable cells by infection can be seen at times in donor sites from which split thickness grafts have been taken. In but a short time a wound known to involve only a partial thickness of the skin (comparable to a second degree burn) can be extended by infection to a full thickness loss. Healing must then progress slowly from the few remaining islands of epithelial tissue or from the margins. This destructive potential of infection must be kept in mind in very deep second degree burns which may be satisfactorily epithelialized from hair follicles and other skin appendages situated in the deeper layers. Our plan of action, therefore, is to eliminate the necrotic cells as soon as possible, support the damaged cells in their return to normal, and encourage the proliferation of the living cells. The major threat to this program from the local point of view is infection. Brooks<sup>13</sup> *et al.* have reported in a large experimental series that burn wound infection was maximal on the tenth day; the hazard of infection, which was most consistently pro-

duced by streptococci, was markedly diminished by prophylactic antibiotic therapy. Blood cultures were positive for streptococci in 78% of cases between the fifth and seventeenth days after the burn.

With this concept in mind, the burn is dressed on arrival at the hospital on sterile sheets, using caps, masks, and sterile gloves. The burned area is gently washed with soft cotton soaked in Septisol solution (an antiseptic soap) and irrigated with sterile saline. The patient may be given morphine but not a general anesthetic. Children are given barbiturates by rectum to allay their fear. No vigorous scrubbing is allowed and blebs are left intact. The margins of burns involving hairy areas are shaved. Fine mesh rayon impregnated with nitrofurazone (Furacin) is applied to the burned area followed by a thick burn dressing of coarse gauze and Kerlix<sup>14,15</sup> (a dressing fabric). Should the burn involve the hand, the fingers are dressed individually and active motion encouraged. Tetanus prophylaxis and an antibiotic such as erythromycin are administered.

If the patient is in satisfactory condition at the end of about a week, he is placed in a tank and all dressings removed under water. (Fig. 3, 4). It is much less painful to float the dressings off in this manner and the disadvantages of a general anesthetic are avoided. The mechanical irritation produced by the removal of adherent dressings results in capillary or gross hemorrhage. This is obviated by the dissolution in water of the interface between the wound and the fine mesh rayon. In order to prevent bacterial cross-contamination, the bath solution is made up to contain one part per million of chlorine. The antiseptic properties of this solution are sufficient to cause



Figure 3

*An electrically powered hoist is useful in transferring the patient from stretcher to water tank.*



Figure 4

*Dressings are allowed to "soak off" under water, aided by gentle traction after 15-20 minutes immersion.*

death of most pathogenic bacteria in 15 to 20 minutes. Chlorine solution in this concentration is not toxic or irritating.<sup>16</sup> In addition, the tank and accessories are cleansed with Septisol between uses. At the time of initial dressing change, the extent of the burn is again estimated and a decision made concerning the advisability of surgical debridement under anesthesia or continuation of frequent dressing changes. If the burned area is covered by a thick eschar, surgical removal under general anesthesia is advisable. As much of the necrotic tissue as possible is removed in the tank and the patient is redressed with Furacin-impregnated rayon, three or four layers of coarse gauze (burn dressing), and is wrapped with wide bandage roll (Fig. 5). This dressing is then wet twice daily with .25% chloramine solution which is helpful in eliminating bacteria and hastening the dissolution of necrotic tissue. The thin dressing dries out between

wettings, thus avoiding maceration of viable epithelium. In the case of adults, dressings are changed twice weekly in the tank, but children often require more frequent changes due to soiling. Any odor or discoloration of a dressing is a signal for its immediate change. This regimen is continued until the wounds are clean and ready for grafting as manifested by a pink granulating surface free of gross infection and exudation. Every effort is made to initiate grafting within two weeks.

When the necrotic cells have been removed, the damaged cells restored to vigor, and the living cells have commenced to proliferate, it is obligatory to close the open wounds as quickly as possible. This can be most effective-

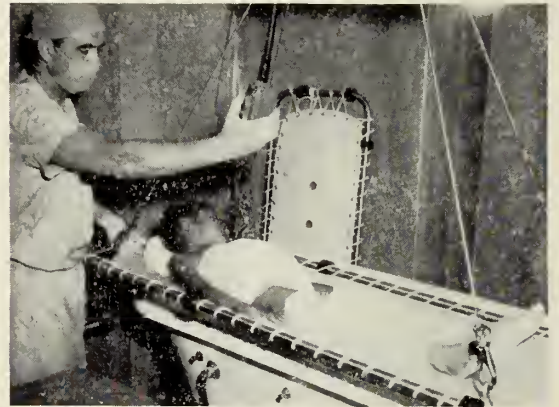


Figure 5

*Patient is transferred back onto a stretcher draped with sterile sheets, after 20-30 minutes of immersion, removal of dressings and debridement of crusts.*



Figure 6

*Dressing the wound is facilitated by the availability of prepared separately canistered rayon squares impregnated with Furacin and cut into various shapes and sizes.*



ly accomplished by complete grafting, that is, the application of large split thickness skin grafts. The area to be grafted is carefully shaved about its margins and cleansed with Septisol. Exuberant granulation tissue, which is potential scar tissue, is carefully excised to its base with a sharp knife and the resultant bleeding controlled by the application of manual pressure on epinephrin-saline packs. One ml. of 1:1000 epinephrin in 250 ml. of saline has an excellent hemostatic action with but very few side effects.

When split thickness grafts are applied to a raw surface, they are supported by a coagulum of tissue fluid at the interface until the ingrowth of capillaries on about the third day. During this period of incubation at body temperature, the viability of the grafted cells rapidly declines until revascularization occurs. Thus, the "take" of a graft can be jeopardized by any factor which interferes with the normal interface of tissue fluid coagulum or the revascularization by tiny buds of ingrowing capillaries. Therefore, the most important threats to the survival of a graft are three: infection, hematoma, and shearing motion. Infection destroys the normal interface coagulum by lysis. Hematoma separates the graft from its nourishing bed. Shearing movement of the graft over its bed interrupts the continuity of the revascularizing capillary buds. Measures taken to combat infection consist of prophylactic systemic antibiotics, adequate debridement, (including the preoperative removal of all crusts and the shaving of adjacent surfaces), and the irrigation of the graft-bed-interface with streptomycin-penicillin-saline solution at the completion of the grafting procedure. Hematoma formation can be prevented by careful hemostasis including, in addition to the usual measures, the electrocauterization of all minute bleeding points and the introduction of small perforations (pie-crusting) for drainage. Shearing movement of the graft may be minimized by the placement of multiple basting sutures across the entire surface of the graft, by circumferential sutures tied over a stent, and by splinting of the involved anatomical area. Upon completion of the operative procedure, the surgical dressing applied consists of a single layer of fine-mesh

rayon placed directly over the graft, covered by coarse gauze soaked in antibiotic solution, and held firmly in place by a light pressure dressing or by the stent dressing mentioned above, depending upon the contour of the area. In the immediate postoperative period, the patient is given erythromycin, novobioicin, or penicillin, parentally, if necessary, because of the effectiveness of these drugs against staphylococcal and streptococcal bacteria. The donor site is initially dressed with fine mesh Furacin-impregnated rayon covered by an absorbent dressing which is replaced on the third postoperative day.<sup>14</sup> By this time it has usually become saturated with serosanguineous discharge and if unchanged would provide an excellent medium for bacterial multiplication, especially in a warm, humid climate. After the graft is primarily healed, the application of a very thin layer of vaseline, or lanolin, to both split graft and donor site helps prevent drying, cracking, and fissuring.

Incomplete grafting with "stamp" grafts has its special indications but is justifiably carried out much less frequently than complete grafting. In this technique a backing of fine mesh gauze, impregnated with vaseline or Furacin for its adhesive effect, is placed on the epithelial surface of a split graft to prevent its rolling upon itself. The Dermatape of the Reese Dermatome also serves admirably for this purpose. The graft so prepared is cut into squares 1 to 4 cm. in area.<sup>2</sup> Grafts of this type are indicated in irregular areas of skin loss where they can be inserted among the existing islands or peninsulas of viable epithelium. In infected areas, these grafts are more prone to survive because of excellent drainage, the loss of one graft in no way compromising the survival of another. They also fit well into areas of irregular contour. In addition, stamp grafts are indicated in extensive burns with limited donor sites, or in poor-risk patients where they can serve as centers of epithelial proliferation. They are especially adaptable to areas of uncontrollable motion, such as the chest wall where they move in harmony with the underlying tissues, thus avoiding any shearing effect on the ingrowing capillaries. The defects between stamp grafts are bridged by thin scar epithelium which is prone to contracture and

the general appearance of these grafts is unsightly. For these reasons, their use is contraindicated on the hands, face and about joints. Because they do not leave deeply scarred pits in the donor site, however, these grafts have largely replaced pinch grafts. The initial dressing of stamp grafts is unusual. They are left exposed to the air but protected by a cage of sponge rubber walls with a wire top ("bird-cage" dressing). On the fifth or sixth day the patient is placed in a tank and the usual dressing ritual for burns resumed until epithelialization is complete.

In very severe burns the area of skin loss is frequently so great that the patient is able to withstand little if any further trauma, as in the taking of extensive split thickness grafts. In such cases homografts, taken from a living or recently deceased donor under aseptic conditions, serve as an invaluable but temporary physiological dressing. They have unquestioned ability to stimulate epithelial proliferation wherever they are placed. At the time of the homografting it is wise also to apply some autogenous grafts in order that there may be a permanent increase in epithelial coverage when the homograft dissolves within 4 to 6 weeks. Homografts of skin are, unfortunately, of very limited availability.

In the sequence of grafting, top priority must be accorded burns of the eyelids, hands, and joints. Certain anatomical structures take precedence over others in the sequence of grafting, in direct relation, of course, to the disability resulting from delay. Burns of the eyelids frequently produce a severe ectropion which may result in corneal ulcer and blindness. For this reason early operation is indicated with the application of a split thickness graft to the upper lid and a full thickness graft to the lower. In severe burns of the hands where effective mobilization of the digits is either impossible or extremely painful, splinting of the hand in the position of function is advised. This is done in addition to dressing the fingers individually and keeping the extremities elevated. In these cases by the use of a Universal or similar splint, the tips of the fingers are kept close to the tip of the thumb. With the hand in this position, even a small range of motion is effective in making the hand

useful and will, therefore, encourage further use. Should the hand become completely immobilized in this position, it is still much more useful than if in extension. The hand is an area wherein early aggressive surgery is mandatory in order to eliminate the periods of edema and ulceration which can lead to serious and permanent loss of function. By operating without a tourniquet the depth of the skin necrosis can be frequently judged by lack of bleeding and the color of the tissues and by preoperative cutaneous anesthesia. In areas of movement, such as the neck and joint surfaces, the regions of skin loss are covered as soon as possible in order to avoid a limitation of motion from contractures and adhesions of raw granulating surfaces.

### Summary

1. The current concepts of the understanding and handling of the thermal burn problem have been briefly reviewed.
2. Three phases of burn treatment are outlined, acute, intermediate, and definitive. Each phase is discussed in terms of specific details of therapy.
3. A concept of surgical care of the burned area is presented with specific consideration accorded the use of a water-bath tank to aid in the elimination of infection, and facilitate early grafting.

### REFERENCES

1. Moore, D.: Burns: An annotated outline for practical treatment. *Med. Clin. North America* 36: 1201, 1952.
2. Wallace, A. B.: Treatment of burns. *Ann. Roy. Coll. Surgeons England*, 5:283, 1949.
3. Cope, O., Graham, J. B., Moore, F. D., and Ball, M. R.: The nature of the shift of plasma protein to the extravascular space following thermal trauma. *Ann. Surg.* 128:1041, 1948.
4. Cope, O., and Moore, F. D.: A study of capillary permeability in experimental burns and burn shock using radioactive dyes in blood and lymph. *Clin. Investigation*, 23:241, 1944.
5. Cope, O., and Moore, F. D.: The redistribution of body water and the fluid therapy of the burned patient. *Ann. Surg.* 126:1010, 1947.
6. Evans, E. I., Purnell, O. J., Robinett, P. W., Batchelor, A., and Martin, M.: Fluid and electrolyte requirements in severe burns. *Ann. Surg.* 135:804, 1952.
7. Brooks, F., Dragstedt, L. R., Warner, L., and Knisely, M. H.: Sludged blood following severe thermal burns. *Arc. Surg.*, 61:387, 1950.
8. Moyer, C. A.: An assessment of the therapy of burns. *Ann. Surg.*, 137:628, 1953.
9. Moyer, C. A.: Recent advances in the chemical supportive therapy of thermal injury. *Texas State J. Med.* 45:635, 1949.



10. Artz, C. P., and Reiss, E.: *The Treatment of Burns*. Philadelphia, W. B. Saunders & Co., 1957.
11. Lund, C. C., Levenson, S. M., Green, R. W., Paige, R. W., Robinson, P. E., Adams, M. A. MacDonald, A. H., Taylor, F. H. L., and Johnson, R. E.: Ascorbic acid, thiamine, riboflavin, and nicotinic acid in relation to acute burns in man. *Arch. Surg.* 55:557, 1947.
12. Cope, O., Nardi, G. L., Quijano, M., Rovit, R. L., Stanbury, J. B., and Wight, A.: Metabolic rate and thyroid function following acute thermal trauma in man. *Ann. of Surg.* 137:165, 1953.
13. Brooks, J. W., Evans, E. I., Ham, W. T. Jr., and Reid, J. D.: The influence of external body radiation on mortality from thermal burns. *Ann. Surg.* 136:533, 1952.
14. Hagerty, R. F., and Jeffords, J. V.: Dressings: fabric vs. plastic. *Surgery*, In press.
15. Jeffords, J. V., and Hagerty, R. F.: The healing of donor sites. *Ann. Surg.* 145:169, 1957.

## THE INCIDENCE OF GALL STONES

JAMES R. CAIN, M. D.<sup>°</sup> AND HENRY DONATO, M. D.<sup>°°</sup>

The incidence of gall stones has been of considerable interest to many medical men over a long period of time. In many instances this interest has led writers to review large numbers of autopsies in order to seek out the relative incidence of gall stones, not only in males and females, but also in the white and Negro races. The wealth of statistical data also includes the incidence in the various age groups. It is interesting that the various data reviewed revealed very striking similarities as regards the incidence of gall stones.

This is a study of 6,107 autopsies performed at the Medical College of South Carolina and the Roper Hospital over the years 1913 to 1948. It was initiated not only to determine whether the incidence of gall stones in our series paralleled that of other authors, but also to see whether there had been any increase in the incidence in recent years. It occurred to the junior author that, with an improvement in economic conditions and particularly with improvements in diet, there might be a corresponding increase in the incidence of gall stones. It was further felt that, if this were true, the increased incidence should be more apparent in the Negro race, since they had probably made proportionately greater strides in recent years in enhancing their diet. Ehrmann,<sup>3</sup> states that the incidence of gall stones in Germany rose after World War I "under improved conditions of nutrition."

The cases studied by autopsy in the years 1913 through 1939 totaled 3,546. These cases were divided into groups according to the age, sex and race, and the incidence of gall stones was determined for each group. The same procedure was carried out on those cases studied by autopsy in the years 1940 through 1948. These totaled 2,561. The incidence in these two periods (1913-1939, 1940-1948) was then compared. The cases in the age groups from 0 to 29 years were deleted from this report because of the disproportionately large group of Negro children examined in an age group in which gall stones are uncommon.

The findings based on this method of study are presented in Table I. In the period 1940-1948, the incidences of the 30 to 100 year old groups were somewhat higher than in the period 1913-1939. It is not clear whether this represents a significant rise in the incidence of gall stones. The slightly higher figures during the 1940-1948 period may be solely on the basis of a general increase in the life span of the population. In any event, the relative pro-

TABLE I  
GALL STONE INCIDENCE IN 30 TO 100  
YEAR OLD PEOPLE

	1913 - 1948			
	Negro Male	Negro Female	White Male	White Female
Autopsies	1677	942	580	258
Gall Stones	20	39	23	33
Incidence %	1.19%	4.14%	3.96%	12.7%
	1913 - 1939			
Autopsies	1132	596	269	108
Gall Stones	13	19	9	12
Incidence %	1.14%	3.18%	3.34%	11.1%
	1940 - 1948			
Autopsies	545	346	311	150
Gall Stones	7	20	14	21
Incidence %	1.28%	5.78%	4.5%	14%

<sup>°</sup>Pathologist, Spartanburg, (S. C.) General Hospital.

<sup>°°</sup>Instructor in Surgery at The Medical College of South Carolina and The Roper Hospital, Charleston, S. C.

(From the Department of Pathology and Surgery of The Medical College of South Carolina and The Roper Hospital)

portions remain, Ludlow,<sup>6</sup> in a study of 4,800 autopsies found a proportionately similar incidence of gall stones.

From our series of cases it can be seen that the white race is approximately three times more susceptible to gall stones than the Negro race. Cunningham and Hardenbergh<sup>2</sup> report a four to one difference. Equally as striking is the consistent sex difference, with females having a significantly higher incidence than males and with white females having the highest incidence. Block,<sup>1</sup> Jaffe,<sup>5</sup> and Lopis<sup>7</sup> in their series of cases also note this sex incidence.

Tables II, III, and IV show the incidence of

gall stones rising with age. It should be emphasized that gall stones are found predominately in adults. The youngest person found to have gall stones in this series was a 17 year old colored female. This was the only case less than 20 years of age. Only eight cases were found in the 20 to 29 year old group. Ludlow<sup>6</sup> found only two cases under 20 years old in his study of 4,800 autopsies. Heringman and Aiken<sup>4</sup> reported six cases of gall stones in persons 16 to 20 years old and stressed that the condition is unimportant in the young.

*Summary.* The incidence of gall stones in 6,107 patients examined by autopsy at the

TABLE II  
GALL STONE INCIDENCE IN VARIOUS AGE GROUPS  
1913-1948

Year	AUTOPSIES				STONES				INCIDENCE %			
	NEGRO		WHITE		NEGRO		WHITE		NEGRO		WHITE	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
30-39	524	317	106	54	4	6	0	1	.76	1.8	0	1.8
40-49	463	258	148	49	4	8	3	5	.86	3.2	2.02	10.2
50-59	322	176	125	52	1	13	8	10	.31	7.3	6.4	19.2
60-69	260	142	117	61	7	9	4	6	2.6	6.3	3.4	9.8
70-79	93	43	66	34	3	2	8	9	3.2	4.6	12.1	26.
80-89	13	15	17	8	0	1	0	2	0.	6.6	0.	25.
90-100	2	1	1	0	1	0	0	0	50.	0.	0.	0.
Totals	1677	942	580	258	20	39	23	33	1.19	4.14	3.96	12.7

TABLE III  
GALL STONE INCIDENCE IN VARIOUS AGE GROUPS  
1913 - 1939

Year	AUTOPSIES				STONES				INCIDENCE %			
	NEGRO		WHITE		NEGRO		WHITE		NEGRO		WHITE	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
30-39	345	227	47	28	3	4	0	1	.86	1.7	0.	3.57
40-49	350	158	72	25	4	4	0	1	1.14	2.5	0.	4.0
50-59	214	100	62	22	1	4	3	5	.46	4.0	4.8	22.7
60-69	166	85	51	19	3	5	2	3	1.8	5.8	3.9	15.7
70-79	54	21	28	12	2	1	4	1	3.7	4.7	14.2	8.3
80-89	2	5	8	2	0	1	0	1	0.	20.0	0.	50.0
90-100	1	0	1	0	0	0	0	0	0.	0.	0.	0.
Totals	1132	596	269	108	13	19	9	12	1.14	3.18	3.34	11.1

TABLE IV  
GALL STONE INCIDENCE IN VARIOUS AGE GROUPS  
1940 - 1948

Year	AUTOPSIES				STONES				INCIDENCE %			
	NEGRO		WHITE		NEGRO		WHITE		NEGRO		WHITE	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
30-39	179	90	59	26	1	2	0	0	.5	2.2	0.	0.
40-49	113	90	76	24	0	4	3	4	0.	4.4	3.9	16.6
50-59	108	76	63	30	0	9	5	5	0.	11.8	7.9	16.6
60-69	94	57	66	42	4	4	2	3	4.2	7.0	3.0	7.1
70-79	39	22	38	22	1	1	4	8	2.5	4.5	10.5	36.3
80-89	11	10	9	6	0	0	0	1	0.	0.	0.	16.6
90-100	1	1	0	0	1	0	0	0	100.	0.	0.	0.
Totals	545	346	311	150	7	20	14	21	1.28	5.78	4.5	14.0

Medical College of South Carolina and the Roper Hospital during the years 1913 through 1948, has been determined on the basis of sex, color and age. These cases were subdivided into two groups, that is, those autopsies from 1913 through 1939, and 1940 through 1948 in order to ascertain whether an improved diet has any effect on the incidence of gall stones.

*Conclusion.* All findings, in these cases, paralleled in all respects the findings of other authors. That the incidence of gall stones increases with advancing age and is greatest in the white female is conclusively demonstrated. Emphasis is placed on the infrequency of gall stones in children. Whether the small increase in incidence of gall stones during the period

1940-1948 over that 1913-1939 is significant cannot be determined.

#### REFERENCES

1. Block, E.: Cholelithiasis in the Negro. *Surg. Gynec. & Obst.* 43:465, 1926.
2. Cunningham, J. A. and Hardenbergh, F. E.: Comparative incidence of cholelithiasis in the Negro and white races. *A.M.A. Arch. Int. Med.* 97:68, 1956.
3. Ehrmann, R. R.: The influence of nutrition on the incidence of gall stones and cholecystitis. *Rev. Gastroenterol.* 9:385, 1942.
4. Heringman, E. C. and Aiken, D. W.: Cholecystitis and cholelithiasis in the young. *Am. J. Surg.* 74:27, 1947.
5. Jaffé, R. H.: Cholelithiasis. *J. Lab. & Clin. Med.* 18:1220, 1933.
6. Ludlow, A. I.: Autopsy incidence of cholelithiasis. *Am. J. M. Sc.* 193:481, 1937.
7. Lopis, S.: The incidence of cholelithiasis in the Bantu. *Clin. Proc.* 6:338, 1947.

## MEDICAL COLLEGE CLINICS

### THE MEDICAL COLLEGE OF SOUTH CAROLINA

#### ELECTROCARDIOGRAM OF THE MONTH

##### The Stress Electrocardiogram

DALE GROOM, M. D.  
Department of Medicine

*Case Record*—A 50 year old lady with symptoms of the menopause acknowledged having had recurrent pain in the mid-chest, usually associated with exertion, for about one year. In recent weeks the pain had awakened her occasionally at night with a consciousness of cardiac irregularity. The recurrences had become progressively more frequent, culminating in an attack of severe substernal pain for which she was admitted to the hospital.

Examinations including several electrocardiograms and serum transaminase determinations failed to show evidence of myocardial infarction. Her pulse was noted by a nurse to become markedly irregular during an episode of pain.

A diagnosis of angina pectoris with probable impending infarction was made on the basis of the patient's history and the tracings illustrated here, recorded before and immediately after mild physical exercise. Pain induced by the exertion was promptly relieved by nitroglycerin, concurrent with a regression of the electrocardiographic abnormalities.

The patient was treated with quinidine and Dicumarol (bishydroxycoumarin). Interestingly, both the angina and the extrasystoles cleared, and for two

months she resumed work and remained virtually free of these symptoms on anticoagulant therapy alone. The Dicumarol was then discontinued, her angina recurred, and a few days later she died suddenly following an emergency readmission to the hospital.

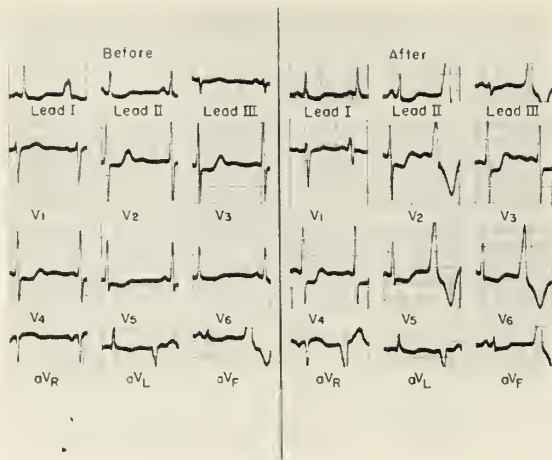
At autopsy the heart showed advanced atherosclerosis throughout the entire coronary arterial tree. The right coronary artery appeared to be completely occluded and areas of fresh infarction were found in the left ventricle and the interventricular septum. An old scar was present near the apex.

*Electrocardiogram*—The resting tracing on the left is similar to one recorded several days previously. Although T waves are diphasic or inverted and the S-T segments depressed about 1 mm. in some precordial leads it contributes little to the diagnosis. Several ectopic beats arise from a single ventricular focus.

After exercise the heart rate is accelerated from 72 to 90, the same ectopic beats become more numerous, and the S-T segments of normally conducted beats are depressed as much as 3 mm. in the precordial leads. Remarkably little alteration takes place in the T waves.

*Discussion*—Now and then we need to remind ourselves that the electrocardiogram is essentially a retrospective test of coronary circulation that shows what has happened rather than what will happen to the myocardium. It depicts the end results of coronary sclerosis. An exception to this is what might be called the "stress electrocardiogram" which attempts to record transitory electrical abnormalities produced by





subjecting the heart to some sort of physical or chemical stress. Only when the reserve of the coronary circulation is depleted to the point that ischemia is imminent, however, can an additional work load on the heart be expected to produce significant changes in the tracing. It is because these changes may be elicited before the actual infarction and sometimes before any clear-cut symptoms or signs of coronary disease that a stress electrocardiogram is often of greater diagnostic value than the ECG recorded at rest.

Two general types of stress are currently utilized for this purpose. The first is that of lowering the oxygen saturation of arterial blood by having the patient breathe a mixture containing only 10% oxygen and is known as the anoxemia test. Electrical abnormalities or pain or both may thereby be provoked from an area of myocardium having an already marginal blood supply. Although the anoxemia entails considerable risk the test has the advantage of affording a stress which is readily measurable and can be standardized for all patients.

The other approach is that of increasing the work load of the heart by various types of physical exertion such as exercising on a treadmill or bicycle apparatus, calisthenics, climbing steps, or simply walking. These procedures have the obvious advantage of involving activities familiar to the patient. On the other hand, exercise tests are undoubtedly less amenable to standardization: while a given amount of work may be measured quite accurately, the effort which they require may be appreciably greater for an individual accustomed to a sedentary life than for one whose muscles and physiology are conditioned by years of strenuous physical activity. The variability in individual response to exercise is perhaps minimized in the popular "Master 2-step" test which takes into account the age, sex and weight of the patient in prescribing the number of trips he is to make up and down a pyramid of two nine inch steps in a given period of time. A repeat electrocardiogram is then recorded, preferably within one minute after com-

pletion of the exercise with the electrodes in place, to compare with the resting tracing made previously.

The generally accepted criterion of a positive test is displacement of S-T segments in one or more leads. How much displacement is a matter of some debate, but since depressions of up to 1 mm. are not uncommon in normal subjects, one should not place too much reliance on minimal shifts of the baseline. Usually the most revealing changes are seen in the precordial leads where an S-T shift of 1 mm. or more is construed as a positive test, indicative of coronary insufficiency. If, as often occurs, the patient's pain is precipitated by the stress, and especially if the pain and the ECG abnormalities promptly subside on administration of nitroglycerin, the diagnosis is rendered even more certain.

Ischemia of subendocardial layers of myocardium is thought to cause the current of injury responsible for depression of S-T segments. These layers are located at the most distal part of the coronary circulation, so that partial occlusion anywhere along the course of an artery might logically be manifested there more than proximally. Hence the usual downward S-T displacement, because normal muscle tissue intervenes between the ischemic area and the precordial electrode.

Other types of changes are frequently seen in the electrocardiogram following stress. An occasional patient may have a bundle branch block only on exertion, denoting impairment of blood supply in the region of the ventricular conduction system. Another response is illustrated in this patient's case by the increase in ventricular ectopic beats from a single focus—probably the site of ischemia (which configuration of the complexes would suggest is in or near the septum.) Certainly either response is indicative of a decreased coronary reserve, irrespective of the usual criteria of a positive test. T wave changes are often prominent after exercise but are presently regarded as of lesser significance.

Several precautions pertaining to these tests should be emphasized. Their purpose is not to induce pain, nor is a positive result necessarily dependent upon reproduction of the patient's symptoms. If angina or undue dyspnea or fatigue does occur the stress should be discontinued immediately and the tracing recorded at that stage. And of course the tests are contraindicated and unjustified in patients whose electrocardiograms at rest are already diagnostic of coronary disease.

Significant abnormalities in the ECG are transitory, often lasting no more than a minute or two, so there should be as little delay as possible between the termination of exercise and the recording of the tracing. Doubtless if this practice were adhered to, and the precordial leads (particularly V<sub>4</sub> or V<sub>5</sub>) recorded first rather than last, there would be fewer false negative results. With the best technique, however, present exercise tests frequently fail to reveal even advanced coronary artery disease. The incidence of false posi-



tive results depends of course upon one's criteria, but they undoubtedly do occur. As yet the stress electrocardiogram falls far short of the niceties of quantitative measurement by which we evaluate pulmonary or renal function, but it is useful in providing objective evidence of impairment of coronary circulation before the ultimate infarction.

The relief which some patients with angina receive from anticoagulant therapy is now well known but little understood. Regardless, if the therapy is discontinued for reasons other than bleeding, withdrawal should be gradual rather than abrupt as judged by the more than ordinary incidence of thromboses immediately thereafter. Improved measures of control of anticoagulant therapy will doubtless bring wider acceptance of its long-term use in patients with known coronary heart disease.

## Incompetent Internal Cervical Os

### A Case Report

EDWARD J. DENNIS, M. D.

Department of Obstetrics and Gynecology

A 30 year woman who had had 4 pregnancies and 4 abortions was first seen on April 25, 1957. She was referred for evaluation since four pregnancies over a period of eight years had all resulted in abortion at approximately 18-22 weeks gestation.

Past history was entirely negative except that related to her pregnancies.

Her menarche occurred at the age of 13. Menses occur every 28 days lasting for 4 to 5 days, and her last normal menstrual period began on April 8, 1957. She denied any symptoms referable to her genitourinary system.

She was an obese colored female weighing 223 pounds. The remainder of the pertinent findings are limited to the pelvic examination.

Pelvic examination showed Bartholin's and Skene's glands and the urethra to be negative. The vagina contained a moderate amount of foamy white discharge and smears were positive for *Trichomonas vaginalis*. The cervix was within normal limits and the uterus anterior in position, normal in size and configuration. No adnexal masses were detected.

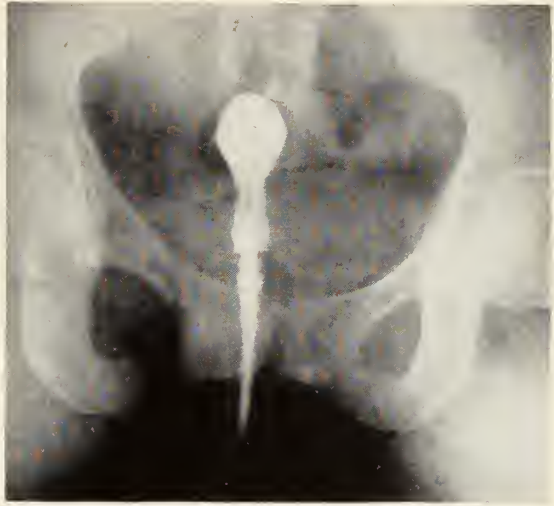
Routine laboratory studies were all normal.

A test for determining incompetency of the os with a cervical dilator was inconclusive.

Hystero-grams using a balloon attached to the end of a standard type endocervical cannula and filled with Lipiodal showed what appeared to be a widened cervical canal. (Fig. I).

The problems involved were discussed with the patient and her husband, and she was asked to go ahead and become pregnant. It was also requested that she call me after her first missed menstrual period.

She was next seen in April, 1958, and at that time stated that her last menstrual period occurred on



March 7, 1958, giving her an estimated confinement date of December 13, 1958. Pelvic examination was inconclusive in establishing pregnancy so she was advised to return in May, 1958.

At the time of her visit in May, examination confirmed the presence of an intrauterine pregnancy.

It was decided to follow her at weekly intervals in order to detect any change of effacement and dilatation in the cervix.

On June 16, 1958, there had occurred approximately 80% effacement but no dilatation of the cervix. It was decided that since she was now approximately 14 weeks pregnant and approaching the stage of pregnancy in which all of her abortions occurred, that repair should be done. The decision was also obviously influenced by the changes in the cervix.

The Shirodkar procedure for closure of the incompetent internal cervical os was done on the 18th of June, 1958. There were no significant technical difficulties except for a moderately severe blood loss.

Her postoperative course was uncomplicated and she was discharged from the hospital on the eighth postoperative day.

At the time of her visit in July, fetal activity was present and fetal heart tones were heard for the first time. This, incidentally was the first time that a pregnancy had progressed to this stage.

On August 1, 1958, she was admitted to the hospital because of vaginal bleeding but had no uterine contractions or leakage of amniotic fluid. Vaginal examination showed the site of bleeding to be the left lateral side of the cervix where the Dacron used in the repair had eroded through the overlying vaginal mucosa. The bleeding stopped and she was discharged after 24 hours in the hospital.

She was next seen one week later with rupture of the membranes and temperature of 100.8° F. Examination confirmed the presence of ruptured membranes and endometritis. It was felt that the sequence of events was first, cellulitis of the area adjacent to the site of erosion of the plastic material through the

mucosa, and then spread to the amnion and production of amnionitis. This obviously led to rupture of the membranes.

Eight hours after admission, the ligature around the cervix was cut allowing the cervix to dilate sufficiently for the delivery of a one pound two ounce immature infant.

It was felt that repair of the cervix at this particular time was contraindicated due to the presence of local infection as well as endometritis.

Her postpartum course was uncomplicated and she was discharged from the hospital on the fifth postpartum day.

**DISCUSSION:** Attention to this syndrome was first presented in this country by Lash.<sup>1</sup> His approach consisted of the establishment of the diagnosis either clinically by passing a sound or dilator into the uterine cervix in order to demonstrate the defect, or, the use of hysterograms as a radiological demonstration of incompetency. Repair of the cervix was then performed before the patient became pregnant.

An obvious revival of interest in the syndrome of incompetent internal cervical os has been demonstrated in the last several months. This seems to be due primarily to an article published by Barter, Riva, and Parks<sup>2</sup> in which 22 cases were reported.

Shirodkar,<sup>1</sup> of India, recognized the same clinical features and findings, however, he recommended correction of the defect during the second trimester of pregnancy. This is the approach now utilized by Barter and others.

The clinical symptoms are those of repeated mid trimester abortion. A sudden escape of amniotic fluid between the sixteenth and twenty-eighth week of pregnancy and the absence of painful uterine contractions preceding the rupture are the most striking features in the history of such pregnancies.

The etiological factor advocated by most is that of trauma at the time of previous delivery or curettage of the uterus. Others feel that in certain cases, a congenital origin of incompetency is tenable and logical.

Establishment of the diagnosis seems to be more accurate if one simply follows the patient at weekly

intervals during early pregnancy in order to determine progressive effacement and dilatation resulting in protrusion of the membranes through the dilating cervix.

As soon as the diagnosis is established, repair should be carried out. This should be done preferably before any significant degree of dilation has occurred since amnionitis is an uncommon but significant complication of the procedure.

The technique of the procedure is not too difficult but requires adequate exposure and a thorough knowledge of what is to be accomplished. After an incision of the vaginal mucosa anteriorly and posteriorly on the cervix, an aneurysm needle is used to pass the material used for ligation of the incompetent os around the cervix. This suture is then tied anterior to the cervix and fixed with interrupted sutures of black silk. It is similarly anchored posteriorly with the same type sutures.

The selection of a proper suture material for the surgery has been difficult, however, the preferable one at this time appears to be Marselene (Ethicon). This is a fine mesh Dacron developed for use in preparation of synthetic arterial prostheses. Fascia grafts utilizing fascia lata from the thigh of the patient have also been used.

Results in the series reported by Barter are encouraging. Before surgery, infant survival in 91 previous pregnancies in this group was 11 per cent, and, following operation, approaches 75 per cent.

#### Summary

1. A case of incompetent internal cervical os is presented with treatment and result.

2. In a patient with repeated mid-trimester abortions, incompetent internal cervical os should be considered.

3. Extreme care and reservation must be made in establishing the diagnosis and delaying the surgical correction until the danger of first trimester abortion is passed.

#### REFERENCES

1. Lash, A. F., and Lash, S. R. *Am J Obst. & Gynec.* 59:68, 1950.
2. Barter, R. H., Dushabek, J. A., Riva, H. L., and Parks, J. *Am J Obst. & Gynec.* 75:511, 1958.





## PRESIDENT'S PAGE

A physician should seek consultation upon request, in doubtful or difficult cases, or whenever it appears that the quality of medical service may be enhanced thereby.

The first thought of importance in a consultation is that it is entirely for the benefit of the patient. Especially is this true in cases of serious illness involving doubtful or difficult conditions. Many times patients deem it necessary and want to have another physician's opinion. The attending physician may disagree, but it is his duty to acquiesce and comply with his patient's request with promptness.

Consultants should always be punctual and, accompanied by the patient's physician, should proceed with their examination. When the examination is complete, the consultant and the attending physician should retire to discuss the case and any treatment deemed necessary. Following this a free and frank discussion of the case should be held with the patient or responsible relatives, the attending physician and the consultant both in attendance.

Observance of the above rules will keep the relationship between the patient and his physician on the highest possible plane and improve the quality of medical care, and many helpful diagnostic and therapeutic hints may be discussed between the physicians.

The first conference on the problem of the aging was held in Chicago last September, at the invitation of the A. M. A., between chairmen of the state committees on aging. Much valuable information was exchanged at this meeting that will be helpful to organized medicine in planning a program of hospital and medical care for the oldsters. One main problem is to keep socialized trends completely foreign to any plan for the care of the aged. Physicians, industry, hospitals, insurance organizations, and the general population will all have to cooperate in formulating a workable plan. I am sure that our state committee, whose chairman was in attendance at the Chicago meeting, will give the house of delegates much valuable information on this urgent matter at our state meeting in May.

While attending the Southern Medical Association Convention in New Orleans the first part of November, I had the pleasure of meeting with the National Alumni Association of the Medical College of South Carolina. Among those present were Dr. Kenneth Lynch, President of the Medical College, as well as other members of the faculty. Dr. Jack Norris of Atlanta, with his usual flair for entertainment, was Master of Ceremonies. The dinner was well attended. Before dinner Dr. Janie Topp of Louisiana entertained at a delightful cocktail party at the Jung Hotel in honor of the National Alumni Association.

I would like to take this opportunity to wish every member of the state association a very happy and most prosperous New Year.

R. L. Crawford, M. D.  
President



# Editorials

---

## THE O'DRISCOLL STORIES

Over the many years during which Dr. Cyril O'Driscoll taught at the Medical College of South Carolina, he achieved a legendary status for his many students and the members of the faculty. Not only is Dr. O'Driscoll a most colorful character himself, but he has acquired over the years a great fund of unusual stories which are themselves quite colorful. There is a wonderful opportunity now for the compilation of a volume which would cover both the life and the laughs of Dr. O'Driscoll, and now is the time to start a collection of material for a final production which would be in the way of a testimonial to him. Many former associates will have had the experience noted in this quotation: "For a time after I came to Charleston I kept track of some of the wonderful stories that were told about him and some wonderful stories which he himself told. He is getting a little milder now, and at some seventy-three or seventy-four years old, has calmed down nearly to the point where most men are at forty."

It is now the purpose and desire of a group of friends of Dr. O'Driscoll to obtain from as many as possible of his former pupils any recollections, anecdotes, stories, or other material which would form the basis of a memorial volume. Dr. Melvin H. Knisely of the Department of Anatomy of the Medical College has undertaken to be the recipient of any articles which may be sent in. So far there are no concrete plans for the way in which the compilation will be handled, but the Committee is very anxious that all who recall experiences and conversations with Dr. O'Driscoll send in as much material as possible, so that the various accounts can be correlated and edited to eliminate overlapping.

## DIET FOR THE PREGNANT

A volume of information over the recent years has built up a more solid knowledge of the diet which the pregnant woman should consume for the purpose of production of

healthy infants and avoidance of anomalies. There are many articles on the subject and a rather large number of brief condensations into terms which are intended to be intelligible to the average woman, but often are perhaps too ambitious for the purpose. There is now available a small but well condensed pamphlet with the title "Food for the Expectant Mother and Her Baby". It is intended for people above the lower levels of intelligence, and is written with authority by Julia Porcher Brunson, who has long been nutritional consultant to the South Carolina State Board of Health. Copies of this pamphlet may be obtained without charge from the State Board of Health for distribution through offices and clinics.

---

## DOCTOR STOKES COLLEGE

A recent newspaper article credits Dr. J. Howard Stokes of Florence with being the ring-leader in a movement to establish in Florence an off-campus center of the State University, where it is possible for students of the area to attend classes which are equivalent to those given at the University in Columbia. Dr. Stokes inaugurated this plan by urging the Kiwanis Club to undertake arrangements for obtaining such a facility. It is expected that this activity will gradually expand to much larger size. Dr. Stokes heads the Florence County Higher Education Commission, a liaison body created by the Delegation to work with the University.

---

## MANAGEMENT OF SYPHILIS

Although tremendous gains have been made in recent years in the control of syphilis, the disease still remains very important for all practitioners. Literature on the subject of management of syphilis is very extensive, and changing techniques in treatment have kept it in a state of near obsolescence. To fill a need for a brief summary of the subject of management of syphilis, a short pamphlet has been written by Dr. Evan W. Thomas, a well recognized authority on the subject. This booklet



can be obtained without charge from the office of Dr. R. W. Ball of the State Board of Health, and it is suggested as a valuable handbook for those who are concerned with the management of the disease.

### TOGETHERNESS AND WELLNESS

For some reason probably related to an underlying personal cantankerous disposition, we have never been able to assimilate with any pleasure the popular so-called word "togetherness" which now is enjoying a fashionable vogue in matters of advertising and otherwise. We have just read in the *Worcester Medical Journal* a short comment on this somewhat nauseating term in which the author proposed to use the word "separateness" as an antidote to the term "togetherness", characterizing the latter "word" as being of doubtfully legitimate origin. He ends with the short comment—"Two clams, moist and soft within one closed clam shell,—that is 'togetherness'." We were reminded of the suggestion of the clams when we were confronted with an announcement in one of our local newspapers that a Mental Health Counselor was to present a talk entitled "Increasing Mental Wellness". So far we have been unable to find any origin for the term "wellness" in our dictionary, and it smacks so much of the same family from which "togetherness" comes, that we are inclined to wonder whether we are now facing an outbreak of these various "nesses", spread rapidly over the country through the eager media of advertising.

The privilege of coining words belongs to anyone, but it should be restricted to the coinage of good words which in some way have some refinement of meaning which was lacking in the older, tried and true variety. We trust that our vigilance will prevent an infiltration of these ominously undesirable newcomers into the pages of this *Journal*.

### ON BOOK REVIEWS

as seen by The Editor, Who Depends  
Gratefully on the Kindness of his Friends  
for these Labors of Love.

The purpose of the book review is to inform the readers of the *Journal* as to the quality and desirability of such medical publications as are submitted for review. The review is written preferably by someone who is recognized as able and perceptive in the field in which the book is included.

From this editor's standpoint the following attributes add greatly to the value of a review:

1. Prompt reporting, so that the review has news value. Sometimes, however, because of varying demands for space in the *Journal*, reviews may not appear for some little time after they are received—hence early receipt is even more desirable.
2. Brevity of statement as comprised in about 150 words. Our space for reviews is limited by the amount of other current material.
3. Evaluation of the book and comparison with similar books, rather than a resume of the contents, or any long exposition of the theme.
4. Frank opinion of the soundness of the book; praise or disparagement as indicated. It is not essential that a book be read in its entirety in order that the reviewer gather an opinion.

Direction of attention to minor typographical errors is not important, unless the error is important. Some note of format, illustrations, etc. may be desirable, but not essential.

FORM FOR REVIEW: Double space, with carbon copy. Title in this form: *ALICE IN WONDERLAND*, by Lewis Carroll. 3rd Edition. Aldus Elzevier Co., Philadelphia. 1957. Pp. 357. Price \$5.00.





*Council of the South Carolina Medical Association, 1958-1959.*  
*Seated—Scurry, D. L. Smith, Crawford, Weston, Cain, Robt. Wilson.*  
*Standing—Burnside, Wyatt, G. D. Johnson, B. S. Smith, Waring, Bozard, Brewer, M. L. Meadors.*  
*Absent—Gressette, Fleming.*

Photo By E. S. Powell

#### MINUTES OF COUNCIL MEETING COLUMBIA, S. C., NOVEMBER 19, 1958

A special meeting of Council was held at the Columbia Hotel on November 19, 1958. The meeting was called to order at 3 p. m. by the Chairman, Dr. J. P. Cain. Members present were Drs. Crawford, Weston, Wilson, Stokes, Waring, B. Smith, Burnside, Scurry, Wyatt, Bozard, Brewer, D. Smith, G. D. Johnson and Mr. M. L. Meadors. During a portion of the meeting Drs. Frank Owens, George Wilkinson, James Galloway, and Harold Jervey were also present.

The minutes of the meetings of May 1958 were read and approved as published.

In regard to the matter of the Duke Endowment furnishing nursing consultants to various hospitals on request, which had been discussed at the meeting of Council on May 13, 1958 and had been referred to the House of Delegates, Mr. M. L. Meadors read the resolution adopted by the Board of Trustees of the South Carolina Hospital Association in January 1958 as follows:

Whereas, There is a real need in South Carolina to improve the care to patients in our hospitals; and

Whereas, this care can be improved by strengthening the preparation of employed nurses through in-service development programs; and

Whereas, This care can also be further improved by extending assistance to the instructors in our schools of nursing to provide stronger programs in nursing education; and

Whereas, administrative hospital and nursing personnel frequently feel the need to seek help in meet-

ing their problems related to patient care; and

Whereas, a consultant whose full-time responsibility would be to work with hospitals at their request would be of great assistance in helping to meet these needs; now therefore be it

Resolved, that the South Carolina Hospital Association hereby requests The Duke Endowment to employ a full-time, qualified nurse consultant to be made available to hospitals, to schools of nursing, and to certain allied health organizations upon request to assist with such nursing service and education progress and projects as may be deemed appropriate to The Duke Endowment.

A motion to approve a similar resolution was adopted, Drs. Burnside and Wilson dissenting.

Dr. George Wilkinson reported on activities of the State Board of Medical Examiners, following which Dr. William Weston, Jr. raised the question of the advisability of excluding graduates of foreign medical schools from serving as residents in hospitals in South Carolina. This was discussed in detail by Dr. Wilkinson, regarding the policies of the Board in this matter, following which Council adopted a resolution reiterating its confidence in the Board of Medical Examiners in the exercise of their discretionary judgment in these matters.

Dr. Harold Jervey, Secretary of the Board of Medical Examiners, then spoke regarding the proposal requiring annual or bi-annual registration of physicians for continuation of licensure. Council expressed its general approval, but it was moved and passed that the matter be brought to the attention of the House of Delegates in May 1959.

Dr. James Galloway then spoke of the activities of the Committee on Certification of Psychologists and it was moved and carried that Council endorse the recommendations of this committee, to the effect that such certification adheres strictly to the fundamental principle that the diagnosis and treatment of nervous and mental illnesses, like other illnesses, remain a medical responsibility. This motion was passed, and it was further moved and carried that the course of action be referred to the Committee on Legislation and the Committee on Certification of Psychologists as well as to the Counsel of the Association.

The following budget was adopted for the calendar year 1959.

Secretary		
Office help	\$ 900.00	
Office expense	600.00	
Travel	500.00	
Total		\$ 2,000.00
Treasurer	\$ 100.00	\$ 100.00
Journal		
Office expense	\$ 1,500.00	
Editor's Salary	1,800.00	
Adv. Mgr. Salary	1,200.00	
Printing	20,000.00	
Total		\$24,500.00
Executive Secretary		
Salary	\$10,000.00	
Office help	7,500.00	
Travel	1,500.00	
Rent	1,200.00	
News Letter	800.00	
Office Supplies	1,500.00	
Tel. & Tel.	1,500.00	
Utilities	100.00	
Conf. and P. R.	750.00	
Insurance	600.00	
Total		\$25,450.00
Delegates to A.M.A.		
Travel	\$ 1,800.00	\$ 1,800.00
President's Expense	\$ 1,200.00	\$ 1,200.00
General Expenses		
Woman's Auxiliary	\$ 650.00	
President's Gift	200.00	
Historical Committee	500.00	
Infant & Child Health	200.00	
Maternal Welfare	200.00	
Contingent Fund	1,000.00	
Civilian Defense	500.00	
Auxiliary Bulletin	1,000.00	
Medico-Legal	1,000.00	
Directories	1,000.00	
Publicity	300.00	
Total		\$ 6,550.00
Total Budget		\$61,600.00

Dr. Frank Owens and Mr. M. L. Meadors spoke of the possibility of legislation being introduced into the coming session of the General Assembly particularly in regard to the practice of Optometry and to the practice of Naturopathy, and Dr. Owens reported on the present status of the "Doctor Draft" situation. Dr. J. A. Stokes reported on the possible introduction of a bill in the Legislature regarding the practice of Optometry, after which Dr. Wyatt moved that counsel continue the support of the South Carolina Medical Association against its passage. Dr. William Weston, Jr. requested to be recorded as opposed to this policy.

Dr. Waring noted that for the past two years the Journal of the South Carolina Medical Association had been sent to senior medical students and to interns and residents in approved hospitals by courtesy of the Eli Lilly Company. This practice was to be discontinued, but a motion was made and carried that the South Carolina Medical Association continue with this policy until another sponsor was found.

After some discussion of the policies of the Association regarding savings and investment programs, it was moved and carried that the Chairman of Council be directed to appoint a committee of three to study the financial and investment policies of the Association and to report to Council in May 1959.

Dr. R. L. Crawford then presented a proposal for a Public Relations program for the Association, prepared by Withers and Newman. A general discussion followed after which this matter was referred to the Committee on Publicity, Dr. J. I. Waring, Chairman, Mr. Meadors, Dr. Wilson, to be augmented by the inclusion of Drs. Crawford and Weston.

Dr. G. D. Johnson, President of the South Carolina Medical Care Plan, reported that the financial condition of the Plan was much better than it had been a year ago, and it was suggested that the information contained in his report be incorporated in a letter to Councillors so that they might carry it to their respective county societies. Dr. Johnson was given the sincere thanks of Council for his excellent report.

The following interim report was received from the Committee appointed to study the position of the medical profession in South Carolina regarding Social Security, submitted by Dr. Ben N. Miller, Chairman.

This committee met in Columbia on November 16, 1958, the following members being present: Dr. George D. Johnson, Dr. Thomas Parker, Dr. Cathcart Smith, Dr. Ben N. Miller, Chairman. Dr. L. S. Miles was unable to attend because of professional responsibilities.

After an extensive discussion by the members of the committee regarding their personal feelings, they then indicated the facts that they had ascertained by questioning the members of the medical profession in their area. After many facets of the problem were discussed, a motion by Dr. George D. Johnson was made as follows: The Committee on the Study of Social Security for Doctors recommends that Social Security



be disapproved at this time. The reasons are listed as follows: (1) Under the present system, payments for Social Security will be borne by future generations; and on this basis it is morally wrong. (2) Social Security is financially unsound. There is no contract. There is no relationship between the amount of money paid in and what is to be received. (3) If Social Security is accepted by the physicians, the profession will be liable to socialized medicine in its most vicious form.

This above motion was made by Dr. Johnson and seconded by Dr. Parker, put and carried by unanimous vote.

It is the committee's feeling that both sides of the problem of Social Security should be presented to the doctors and that Council make the following recommendations: (1) That basic information be supplied to the members of the South Carolina Medical Association, (2) That a plan of polling by mail be carried out to get a sampling of membership opinion, (3) That a formal hearing before committee prior to the annual meeting of the Association be held with ample time for discussion by those for and against the system.

A motion to adopt this report was approved, and the committee was requested to follow through with this recommendation and extended the sincere thanks of Council. The Executive Secretary was asked to cooperate in the plan of polling the membership of the Association.

It was reported by Mr. M. L. Meadors that a new Medicare contract had been signed and the fact was to be called to the attention of the House of Delegates that Medicare does not remunerate radiologists, pathologists and the like whose work is charged for by the hospital.

A proposed fee schedule of industrial compensation, under the terms of the Workman's Compensation Law, was presented and given the approval of Council.

A proposal from Dr. R. W. Ball, Director of the Division of Venereal Disease Control of the State Board of Health, regarding the sponsorship of programs on this subject to be held in various centers throughout the state in the spring of 1959 was approved by Council.

A report from Dr. Ben N. Miller recommending minimal physical and mental requirements for obtaining drivers licenses in the state was read and received as information.

A letter addressed to Dr. John Fleming was reported to Council requesting action by the South Carolina Medical Association regarding the administration of free immunization shots to private patients. It was noted that the House of Delegates had approved this matter in principle at the May 1958 meeting and the Secretary was directed to send another copy of the resolution to the State Board of Health.

Dr. William Weston, Jr. reported that he could not attend the Minneapolis session of the American Medi-

cal Association in December 1958, and as his alternate, Dr. Wilson, was likewise unable to attend, Dr. C. N. Wyatt was approved as acting Delegate from the State Medical Association to this meeting.

The Chairman pointed out that in regard to the matter of the Duke Endowment furnishing nursing consultants to various hospitals on request, the resolution adopted by Council earlier in the meeting, that the matter had been approved by the House of Delegates in May 1958 and that a thorough investigation had been made by Mr. M. L. Meadors before he presented the resolution adopted by the S. C. Hospital Association.

Council then elected the following for the calendar year 1959. Editor of the Journal—Dr. J. I. Waring; Executive Secretary—Mr. M. L. Meadors; Treasurer—Dr. J. H. Stokes.

There was no further business and Council adjourned at 7 p. m.

Respectfully submitted,  
Robert Wilson, M. D., Secretary

---

#### REPORT: ADVISORY COMMITTEE, "MEDICAL STANDARDS FOR DRIVER CERTIFICATION"

At the request of Mr. Claude R. McMillan, Chief Highway Commissioner of South Carolina, Dr. D. Lesesne Smith, President of the South Carolina Medical Association, appointed a "Committee to study minimal physical and mental requirements for obtaining drivers' licenses" in January, 1958. This Medical Standards Committee was appointed as follows: Dr. Ben N. Miller, Chairman; Dr. Tucker Weston; Dr. William Morehouse; Dr. Shepard Dunn; and Dr. O. B. Mayer, Ex-officio.

Dr. O. B. Mayer is a member of the Executive Committee of the South Carolina Highway Safety Committee representing the medical profession.

As a member of the House of Delegates of the South Carolina Medical Association, Dr. O. B. Mayer introduced in the May, 1958, meeting the following motion: (1) That the age of issuance of drivers' licenses be increased from fourteen to sixteen years, (2) That periodic examination of drivers be required to retain licenses. This motion was voted on favorably by the House of Delegates.

The members of the Medical Standards Committee have studied present South Carolina Highway Department medical standards and have made detailed inquiries through various national medical and safety groups. The following conclusions have been made: (1) That drivers' re-examinations at designated intervals are mandatory if workable, minimal standards for issuances of licenses are to be applied, (2) That re-examinations should be on a simple certified questionnaire basis. Applicants indicating no impairment will have a re-issuance of driver's license by the usual departmental procedure. Those applicants who are suspected of having an impairment, either by departmental records or by an affirmative reply to the



questionnaire, will have a medical evaluation before being re-certified for issuance of driver's license.

The Medical Standards Committee will proceed with its study and will recommend a standard procedure for evaluating individual cases in accordance with an acceptable uniform code.

The Medical Standards Committee recommends the following:

1. Renewal of driver's license be put on a periodic basis, and renewed only upon satisfactory evidence of physical and mental fitness as determined by an appropriate questionnaire.
2. The above are in addition to tests of driving skill and knowledge of driving regulations.
3. Applicants meeting requirements have licenses renewed promptly.
4. Substandard applicants be required to submit medical evidence of their fitness to safely operate a motor vehicle.
5. Falsification of statements will delay renewal or forfeit the privilege of renewal, depending on circumstances.
6. That a guide setting forth minimum mental and physical standards be prepared for examining physicians.
7. Raise minimum driver's age from 14 years to 16 years because of undesirable social and medical consequences.

Respectfully,

Ben N. Miller, M. D.

Chairman

Dr. William Morehouse     Dr. Shepard Dunn  
Dr. O. B. Mayer, Ex-officio Dr. Tucker Weston  
9 September, 1958

---

## CORRESPONDENCE

---

Dr. Joseph I. Waring

I am writing to put before you several items of importance that the A. M. A. House of Delegates feels the state associations should take a lead in at once.

First, by far the most important, is old age medical care. It has been recommended that each state association, working with its local Blue Shield, work out some method of caring for persons over 65 who have limited resources. It has been suggested that physicians agree to accept a smaller fee for services to people over 65 who have a smaller income. Another way, in the future, is for Blue Shield subscribers to pay a little more during their earning years and be assured of medical care after 65 when income is reduced. Cathcart Smith attended the conference on Ageing and I'm sure is familiar with all these ideas. Governor Freeman of Minnesota made it unmistakably clear

that unless physicians take a constructive attitude, and soon, the government will. He gave the following startling facts that apply to South Carolina as well as to Minnesota. In the next 10 years the age group under 21 will increase by 25%; the 21 to 65 group by only 9%; and over 65 by 35%. The income producing group will increase only 9% and the over 65, the usually retired group, by 35%.

The A. M. A. House of Delegates memorializes the component medical associations "to make every effort to provide a type membership for military, public health, and veterans' administration physicians which will enable them to become active members of constituent societies and of the American Medical Association".

The House of Delegates encouraged further study of the "*Hometown Medical Care Program For Veterans*" and urged that all medical societies at all levels develop committees to assist in guaranteeing V. A. Hospital admissions for (1) service connected cases and (2) those cases where an illness constitutes an economic disaster which would justify care by a V. A. Hospital.

The House further recommends that each state association continue its studies in the field of medical care of the indigent.

Since there is no way for officers of the A. M. A. to know who is interested in *Medical Practice and Plans* it is urged that someone in the state association inform Dr. Blasingame who in the state should receive the Report of The Commission on Medical Care Plans. These are expensive, The A. M. A. wants all interested parties to have one but sees no reason to send them to parties not interested.

In the legislative field, of fifteen bills involving medicine enacted into law, only one was opposed by the A. M. A. In its statements to Congress the Association was supporting the legislation or principle involved on 19 occasions and was in opposition on only six occasions. It is important for physicians and members of legislature to realize that the A. M. A. isn't against every medical bill introduced in Congress.

The A. M. A. House of Delegates further recommends that each state conduct a relative-value study in its own state rather than depend on a nation-wide study.

If there is any further information that Charlie Wyatt or I can supply please let either of us know. Charlie replaced "Bully" Weston at the Minneapolis meeting. We both agreed that not 2% of the physicians in South Carolina realize the urgency and importance of what is going on in the A. M. A. headquarters and in Congress.

Sincerely yours,  
George D. Johnson, M. D.



## BLUE CROSS . . . BLUE SHIELD



When the number of hospital beds available in a community or when the ancillary facilities of a hospital materially exceed the community's needs, there arises unfortunate expense of hospital operation. As a result there is a definite temptation to encourage overutilization of the hospital and its facilities. Hospital management, the professional staff and the people all feel the urge to support their hospital to the utmost.

When the hospital beds are constantly filled and when there are times when a patient has to wait for a bed, there arises a demand for hospital enlargement.

The building of hospitals has come to be community projects. The money is raised by a bond issue and is repaid by taxation. Therefore, every tax paying citizen becomes a partner in the venture. If the need for more beds has not been miscalculated or if the need for new ancillary facilities is real, there can be little legitimate complaint, provided the money is spent with due care.

However, the public is a poor judge of what and how much increased hospital facilities are needed. It should be the duty of the medical profession and of hospital management to direct public opinion wisely. To do that requires more than a review of the daily and the average patient load.

The Sacred Heart Hospital of Allentown, Pa. has 400 beds. Early in 1956 it was found that reservations for admission when beds became available numbered about 100 at all times. Elective cases had to wait for six to eight weeks before they could be admitted. In April, the staff, with the approval of the Executive Board, set up a Committee on Admissions, Conduct, and Discharges. This committee was directed to study the problem of bed shortages and to create rules and regulations to correct them. More important, it was directed to enforce the rules which it made. It was given authority to examine patients and their charts, and to attempt to ascertain whether or not hospital care had been indicated and whether or not the degree of urgency of the case had been up graded.

The committee found about 10 per cent of the hospital beds occupied by patients with hospital and medical insurance who were in for diagnostic check-ups or for minor surgery which could have been done on an out-patient basis. The committee came to believe that some doctors preferred to treat patients who had health insurance in the hospital and that these doctors were inclined to allow their patients to remain in hospital longer than necessary. It found that patients were often in the hospital for days before consultations were culminated. It found some "boarders" who required or desired domiciliary care, but who did

not need the care provided by an acute disease hospital.

It was customary to write discharge orders late in the day. This prevented admission of elective cases that day.

The committee prepared a chart for priority of admission. Emergent cases were divided into three groups: critical cases, which were to be admitted immediately regardless of beds; serious cases, which were to be admitted within three hours; and urgent cases, which were to have priority over all other cases except the critical and the serious cases. Types of cases falling in the respective groups were tabulated. Before a patient could be admitted as an emergent case, the doctor had to give the admitting clerk a diagnosis which was listed in one of these groups.

The committee met every morning to check admissions of the preceding 24 hours, to advise the admitting clerks as to the order of admission of listed cases and to check the degree of need for hospital care of cases in the house.

Consultations were ordered expedited. Doctors were asked to transfer patients, whom they expected to transfer to another doctor, before admission rather than after. Orders for x-ray examinations were to be made a day in advance of admission when possible so that hospital beds would not be occupied by patients waiting for such examinations. Two daily check-out hours were set and enforced. An earlier hour saved payment for a half day, the later required a full day's cost.

The house staff and floor nurses were required to notify the committee of patients who they thought could be discharged. All "boarders" were discharged to nursing homes, sanatoria or to their own homes.

During the first year, there was a 6 per cent increase in patient days and an 8 per cent increase in patient admissions. However, there were still too many patients entering hospital to avoid paying for x-ray and laboratory examinations, and there were still too many doctors who hospitalized patients who requested it or because they carried insurance that paid the doctor for hospital calls. It was found that people with health insurance unconsciously tended to develop a greater than normal concern about their health.

Dr. Kenneth W. Taber, who was chairman of the committee and who discussed the Allentown plan at the meeting of the Medical Society of the State of Pennsylvania in September, 1957, stated that the success of the program was due to the cooperation of every member of the staff and of the administration. He believed that the committee could accomplish

little without such cooperation. In summing up his discussion he stated, "There is nothing further that the staff can do to solve this problem (creating active beds for new patients), and we cannot expect the patients to solve it. All that the hospital can do is to follow . . . the idea of constructing a separate building or wing for ambulatory patients undergoing study, minor treatment or convalescence. This wing would simulate a hotel with ordinary furniture and with dining rooms or cafeterias, all of which would cut down the cost of construction and material by 50 per cent or more and would reduce the payroll of such patients' nursing and waitress services by more than 60 per cent. We cannot expect hospitals to jeopardize their relations with the insurance carriers or staff members by enforcing rules which make the patients pay their own bills."

Dr. Taber believed that insurance carriers will have to help solve the problem of overutilization or improper utilization in order to save themselves and their policy holders unnecessary hospital costs by including in their contracts a \$25.00 deductible feature or by limiting the contracts to low income groups. He suggested that all health insurance carriers require proof of need for hospitalization by having attending physicians sign statements as to why the patient had been hospitalized, whether for diagnostic studies or for treatment of disease. He believed that hospital admissions would be reduced about 10 per cent if Blue Cross and Blue Shield would agree to pay for x-ray examinations of out-patients. Although Dr. Taber did not say so, his statement indicates that his committee's studies revealed that about 10 per cent of patients admitted to Sacred Heart Hospital came for general diagnostic surveys.

The insurance commissioners of a number of states have become seriously concerned about the increasing costs of hospital insurance. They feel that the increases would be unnecessary if hospitals, doctors, and insurance carriers would cooperate fully in an effort to decrease overutilization and improper utilization of health insurance and to reduce or eliminate unnecessary in-hospital examinations done either for convenience or in order to get them done without cost.

Some South Carolina doctors have been insistent that Blue Cross begin some method of inspection of hospital admissions in order to discourage abuses of insurance contracts. Blue Cross management believes that such inspection is a matter which would have to be handled by the hospitals and their professional staffs. The experience in Allentown would seem to substantiate that belief. Protection of Blue Cross from abuse should be an obligation of doctors and hospitals. Without such protection, it is helpless to contain utilization within the provisions of the contract and to keep insurance costs down to a reasonable figure. If each hospital were to have a working staff committee similar to the committee at Sacred Heart Hospital, with power to make and enforce rules against unnecessary hospital care, there would result a very

substantial decrease in improper utilization of hospital facilities and would limit the need of ever increasing bed capacity. This would decrease insurance costs to the public and building expense to the taxpayer, without lessening the quality of sickness care.

J. Decherd Guess



"THANKS, DOC, I MUST BE RUNNING ALONG NOW."

## ANNOUNCEMENTS

ANNUAL SEMINAR  
CARDIOVASCULAR DISEASES  
Jacksonville, Florida  
February 19, 20, 21, 1959

The Sixth Annual Seminar on Cardiovascular Diseases will be held on Thursday, Friday and Saturday, February 19-21, 1959, at the Prudential Auditorium in Jacksonville, Florida. This course is sponsored by the Northeast Florida Heart Association in cooperation with the Division of Postgraduate Education of the College of Medicine of the University of Florida. This Seminar has been accepted for credit by the American Academy of General Practice.

The speakers for the course are Dr. Samuel A. Levine, Dr. Irving S. Wright, Dr. A. G. Morrow, Dr. Victor A. McKusick, Dr. Max Michael, Jr., Dr. William J. Taylor, and Dr. Myron W. Wheat, Jr.

This course will include recent developments in the diagnosis and treatment of Cardiovascular Diseases. The formal lectures will be correlated with panel discussions and question periods in which the entire staff will participate.

Information may be obtained from Dr. Daniel R. Usdin, M. D., Chairman, Cardiovascular Seminar,



Northeast Florida Heart Association, 1628 San Marco Boulevard, Suite 7, Jacksonville 7, Florida.

American College of Allergists Graduate Instructional Course and Annual Congress, March 15-20, 1959, Mark Hopkins Hotel, San Francisco, California. Contact, John D. Gillaspie, M. D., Treasurer, 2049 Broadway, Boulder, Colorado.

#### POSTGRADUATE COURSE ON DISEASES OF THE CHEST

We wish to announce that the Council on Postgraduate Medical Education of the American College of Chest Physicians will present the 12th Annual Postgraduate Course on Diseases of the Chest at the Sheraton Hotel, Philadelphia, March 30 - April 3, 1959.

The most recent advances in the diagnosis and treatment of heart and lung diseases, medical and surgical aspects, will be presented.

Tuition for this five-day course will be \$100, including luncheon meetings.

Further information may be obtained by writing to the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

#### VANDERBILT UNIVERSITY MEDICAL CENTER

Second Postgraduate Course in  
PEDIATRICS

Sponsored by

*American Academy of Pediatrics*

March 17, 18, and 19, 1959

Nashville, Tennessee

#### THE SOUTHEASTERN SURGICAL CONGRESS

*Twenty-Seventh Annual Assembly*

March 9, 10, 11, 12, 1959

(Monday, Tuesday, Wednesday, Thursday)

DEAUVILLE HOTEL

MIAMI BEACH, FLA.

#### DR. PETTIT INSTALLED BY SOCIETY

Five Physicians Honored By Medical Group

The Charleston County Medical Society has installed Dr. Harold S. Pettit as president for the coming year.

Other officers installed were Dr. George G. Durst, vice president, and Dr. R. Maxwell Anderson, secretary-treasurer.

Five members of the local group were recognized for their length of membership in local, state and national organizations.

Dr. William H. Prioleau and Dr. Louis S. Miles were elected to honorary membership in the Charleston County Medical Society. Dr. Leon Banov and Dr. C. D. Boette became honorary members of the South Carolina Medical Assn., and Dr. M. W. Beach was selected as an honorary member of the American Medical Assn, as well as the county and state organizations.

#### DIVISION OF PUBLIC HEALTH NURSING CREATED IN PHS

The Division of Public Health Nursing was created in the Bureau of State Services of the U. S. Public Health Service following approval on August 15, 1958, by HEW Secretary Fleming of Surgeon General Burney's recommendation for its establishment.

Public health nursing represents the largest single group of professional public health workers in the United States and is a vital factor in contributing to the total public health movement.

The new Division has two branches: one concerned primarily with training and career development, the other with research. The staff will plan and conduct research projects and field studies in relation to public health nursing practice.

Chief of the new Division is Margaret Arnstein. Zella Bryant is Division Deputy Chief, Frances E. Taylor is in charge of Training and Career Development, Doris E. Roberts is in charge of Operational Research, Marion Ferguson is Consultant in Studies, and Mary Vesta Marston is Consultant in Operational Research.

## NEWS

At the Southern Thoracic Surgical Association held in Miami, Fla., on November 28th, Dr. Edward F. Parker was elected president for 1958-59.

#### DR. HANCKEL ELECTED

At the recent meeting of the Executive Committee of the Alumni Association held at the time of Founders' Day, Dr. Richard W. Hanckel of Charleston, S. C., was appointed secretary-treasurer of the Association to take the place of Dr. Joseph P. Cain, Jr., of Mullins, who had asked to be relieved of his duties. Dr. Cain has faithfully served the Association in this capacity for the past eleven years.

Dr. Louis A. Johnson and family of Cheraw, South Carolina are locating in Graniteville. He opened his office in the Masonic Center on November 3.

Dr. Johnson entered the Citadel in 1945 and was called into military service in April, 1946.

After serving as a medical technician in the European theater and in Greenland, he was honorably discharged in November, 1947.

He re-entered the Citadel and graduated in June, 1951. He entered the Medical College of South Carolina and graduated in 1955.

In July, 1955 he began his internship in the University Hospital, Augusta, Georgia and finished this course of studying in June, 1956. Dr. Johnson has



been practicing in Cheraw, South Carolina for the past two years.

---

Louis M. Palles, M. D. announces the opening of an office for the practice of Gynecology and Obstetrics, 492 W. Cheves Street, Florence, South Carolina.

---

Julian P. Price, M. D. and Walter Moore Hart, M. D. announce the removal of their offices to 248 South Irby Street, Florence, South Carolina. Practice limited to Pediatrics.

---

#### PHS SEES AIR POLLUTION AS DISEASE FACTOR

Public Health Service, issuing a report in advance of the National Conference on Air Pollution November 18-20, stated that it appears likely that the medical effects of air pollution are not confined to the respiratory and circulatory systems. Epidemiological and statistical studies show parallels between air pollution and mortality rates from cancer of the stomach and esophagus, similar to those from lung cancer. PHS also made the point in its report that mortality rates for lung cancer among urban dwellers are significantly higher than among strictly comparable rural groups, smoking habits notwithstanding.

On the economic effects of air pollution, PHS said that it is quite apparent that the estimated third of a billion dollars now spent for prevention is out of line with the estimated \$4 billion spent for neglect. "More money put into the asset side would remove several times as many dollars from the debit side."

---

The following applicants from South Carolina for Fellowship in the American Academy of Pediatrics were taken into the Academy recently.

Mauldin Joe Boggs, Abbeville, S. C.

Joseph Earle Furman, Greenville, S. C.

William Belser Gamble, Jr., Charleston, S. C.

Gilbert Flowers Young, Charleston, S. C.

---

#### FLEMMING CITES AMA JOINT EFFORT AGAINST FOOD FADDISM AND QUACKERY

HEW Secretary Flemming reports a "disturbing increase" in quackery involving false and misleading claims for a variety of vitamins, minerals and other food supplements. Operations in this field have become the most widespread and costly form of medical quackery in the country today, he told a press conference. He quoted an American Medical Association estimate that such operations are costing 10 million Americans over \$500 million a year.

The Secretary reported that Food and Drug Administration had 350 inspectors but that they were not enough. In fighting quackery, law enforcement, of course, is only part of the answer. It is perhaps even more important to help the public understand the facts about nutrition and to warn people against

false claims and theories," he commented. "In this connection I cannot commend too highly the educational program against food faddism and quackery being sponsored by the AMA, the National Better Business Bureau and the FDA." In October, AMA distributed a comprehensive campaign kit to secretaries and executive secretaries of state and county medical societies to help them organize local drives against food faddism, which AMA noted was spreading throughout the country with "alarming speed."

---

Dr. Julian P. Price of Florence has been named by Surgeon General LeRoy E. Burney of the Public Health Service as a member of his consultant group in medical education.

---

Dr. Joseph P. Cain, Mullins, has been appointed by the Governor to fill the term of Dr. Frank Martin as a member of the Board of Trustees of the Medical College of South Carolina.

---

Dr. Kelly T. McKee, Charleston, has been elected secretary of the Section on Medicine of the Southern Medical Association.

---

Dr. J. W. Jervey, Jr. of Greenville has been elected a member of the Executive Committee of the Southern Medical Association.

---

Dr. Robert Wilson, Charleston, was elected vice-president of the St. Andrews Society at its November meeting in Charleston. Whether he attended the meeting attired in the conventional kilts and indulged in the pleasures of the haggis, the source saith not.

---

#### DR. McDANIEL MAKES CHAIRMAN'S ADDRESS AT SECTION OF SOUTHERN MEDICAL

"Physicians and Progress in the Public Health" was the subject of the Chairman's address by Dr. G. E. McDaniel to the Public Health Section during the meeting of the Southern Medical Association in New Orleans from November 3 through 6.

Dr. McDaniel discussed the subject from his experience of 30 years in public health as county health officer and state epidemiologist. Physicians have devotedly and successfully aided man in his struggles against disease and death, he said. They have conquered many physical and mental problems, but changing populations and environments present new ones. Physicians must accept their responsibility for and actively exert leadership or even recapture some lost leadership in solving these new problems of the future.

---

#### DR. TOWNSEND APPOINTED NEW HEAD OF LABORATORY

Dr. Eleanor W. Townsend has been appointed Acting Director of the Laboratory of the State Board

of Health, according to an announcement by Dr. G. S. T. Peeples, State Health Officer. This appointment fills the vacancy recently created by the death of Dr. Harry F. Wilson.

Dr. Townsend has been Clinical Pathologist in the Board of Health's Laboratory since March, 1956, spending a considerable part of her time in the development of the virology service.

Born on Edisto Island, Dr. Townsend attended schools in Charleston County and in Columbia and received her pre-medical training at the College of Charleston. She received her M. D. degree from the Medical College of South Carolina and served internships at Mercy Hospital in Bay City, Mich., and Willard Parker Hospital in New York City.

She has served as Instructor and Associate in Clinical Pathology at the Medical College of South Carolina and as Assistant Professor of Pathology and Bacteriology at Emory University School of Medicine.

Dr. Townsend has been pathologist at the Kentucky Baptist Hospital in Louisville and Chief of Laboratory Services at the Veterans Administration Hospitals at Mountain Home, Tenn., and Salisbury, N. C.

She was on active duty in the U. S. Naval Reserve for two years and is now a Commander in the Naval Reserve in retired status.

Dr. Townsend is a member of the South Carolina Medical Association, the Southern Medical Association, the American Medical Association, the American Medical Women's Association, the American Society of Clinical Pathologists, and the College of American Pathologists.

---

November 21, 1958

FROM: G. S. T. Peeples, M. D., State Health Officer

SUBJECT: Haitian Voo-Doo Dolls, Carved from Cashew Nut Shells

We have received the following message, via telegram, from the United States Public Health Service, on the subject of Haitian Voo-Doo Dolls:

"The Public Health Service cautioned today that Haitian Voo-Doo Dolls carved from cashew-nut shells, imported and sold in this country as novelties and beverage "swizzle sticks", can have harmful effects on persons handling them.

"The Public Health Service said that analysis of the dolls revealed that the cashew nut heads contain a shell liquid chemically similar to the oil in poison ivy.

"Volunteers at the Services occupational health field headquarters at Cincinnati who were tested with pieces of the shell developed blistering skin reactions within 35 to 50 minutes.

"Possibly even more dangerous than the cashew-nut heads, the Public Health Service said, are the dolls eyes, which are believed to be lethal jequity beans.

"The Service reported that animal tests indicate that

one of the eyes taken internally by a baby could cause serious and possibly fatal illness.

"The Public Health Service study followed a recent allergic outbreak involving 50 students in an Atlanta, Georgia, high school.

"Dr. Harold J. Magnuson, Chief of the Services Occupational Health Program, immediately informed the Haitian Embassy of the problem and was told by officials that their government would be asked to stop shipment of the dolls to the United States. It is believed, however, that a substantial number of dolls have already been sold in this country, and extreme caution is urged in the manner in which they are used.

"The trouble has arisen only in connection with cashew-nut dolls, the Service said. Similar dolls carved from coffee beans do not present this problem. A cashew-nut shell is kidney shaped and is an inch or more long and about 3/4 of an inch broad. Coffee beans are a great deal smaller."

The telegram is signed by Dr. David E. Price, Chief of the Public Health Service Bureau of State Service, and we are sending it for your information and guidance.

---

#### A.M.A. TO SPONSOR THREE MEDICOLEGAL MEETINGS

The American Medical Association announced today that another series of three regional medicolegal conferences will be held next March and April as part of a continuing effort to create a better working relationship between lawyers and doctors.

Dates and locations for the conferences are: at the District of Columbia Medical Society headquarters, Washington, March 20-21; at the Hotel Cleveland, Cleveland, April 4-5, and at the Hotel Utah, Salt Lake City, April 18-19.

The three conferences, sponsored by the A.M.A. Law Division in cooperation with state and local medical societies, will draw doctors and lawyers from surrounding states. While most of the participants on each program will be from out of the state, local speakers will also appear. Between 250 and 400 persons are expected to register for each meeting.

While the program for each meeting will not be completed until after the first of the year, it has already been decided that the following subjects will be covered in speeches and question-and-answer periods: narcotic addiction, traumatic neurosis, Res Ipsa Loquitur and medical professional liability, contingent fees and impartial medical testimony.

At each of the meetings the sessions will be presented for a half day on Friday and a full day on Saturday. Luncheons will be served each Saturday with no planned program on Friday night.

The registration fee for each conference will be \$5 to cover the cost of the luncheon and a copy of the proceedings. Advance registrations should be mailed to the Law Division, American Medical Association, 535 North Dearborn Street, Chicago 10.

THE ATLANTA GRADUATE MEDICAL  
ASSEMBLY IS SCHEDULED FOR  
FEBRUARY 16, 17 & 18, 1959  
IN THE USUAL PLACE

ATLANTA BILTMORE HOTEL, ATLANTA, GA.

The Speaking Faculty is extensive. I am sure you will agree that it would be difficult to find a more accomplished, authoritative, renowned or provocative faculty group for any graduate meeting.

This year's (1959) program promises to present the most versatile, well-rounded, comprehensive and interesting schedule so far. More of the Luncheon Conferences and Afternoon Roundtable Seminars (which have proven to be such popular sell-outs in the past) have been added.

A splendid menu of social and entertainment events for the visiting ladies has been arranged by the Fulton County Medical Society Auxiliary. Atlanta is a city of fashion, theater, clubs, entertainment, and beautiful homes.

There are also a few entertainment (as well as educational) "extras" added to this year's program for the doctors which we guarantee will send you home happy and satisfied. Come see.

MARK IT ON YOUR CALENDAR. Start planning NOW to attend the biggest, best-all-around graduate assembly yet.

JOHN S. ATWATER, M. D.  
Chairman

Atlanta Graduate Medical Assembly is endorsed for 15 hours in Category I by the G.A.G.P.

SOUTH CAROLINA HEART ASSOCIATION  
ANNUAL MEETING

Monday, February 2, 1959

Baruch Auditorium  
Medical College of South Carolina  
Charleston, S. C.

Scientific Program

Dr. George Wilkinson presiding.

8:30—Registration

9:00—Dr. Dale Groom, Assistant Professor of Medicine, Medical College of S. C. "Coronary disease in the Negroes of Haiti and the United States."

9:15—Dr. Edwin Boyle, Associate in Medicine, Medical College of S. C. "Clinical significance of blood sludging in vascular disease." (With movie).

9:30—Dr. Edward Massie, Associate Professor of Clinical Medicine, Washington University Medical School, St. Louis. "Infarction occurring in bundle branch block."

10:30—Dr. Peter C. Gazes, Assistant Professor of Medicine and Pharmacology, Medical College of S. C. "Plasma catechol amine concentrations in myocardial infarction and angina pectoris."

10:45—Dr. Thomas D. Darby, Assistant Professor of Pharmacology, Medical College of S. C. "Studies of the changes in cardiovascular dynamics during angina pectoris and nitroglycerin therapy."

11:00—Dr. Joseph E. Murray, Director, Surgical Research Laboratory, Harvard Medical School, Boston. "Clinical and experimental homotransplantation of skin, kidney and bone marrow."

12:00—Annual meeting of voting members of S. C. Heart Association. Lunch.

Dr. R. Catheart Smith presiding.

2:00—Dr. Jerome S. Harris, Professor of Pediatrics, Duke University Medical School, Durham. "Rheumatic heart disease in childhood."

3:00—Dr. A. Izard Josey, Columbia, S. C. "Experiences with serum cholesterol in an office practice."

3:15—Dr. John A. Boone, Professor of Medicine, Medical College of S. C. "The coincidence of patent ductus arteriosus and rheumatic heart disease, with a comment on the 'post-commissurotomy syndrome'."

3:30—Dr. Andrew G. Morrow, Chief, Clinic of Surgery, National Heart Institute, Bethesda. "The correction of congenital and acquired heart diseases with the aid of extra-corporeal circulation."

4:30—Dr. Wendell B. Thrower, Assistant Professor of Surgery, Medical College of S. C. "Recent advances in the surgery of valvular heart disease."

4:45—Dr. Edward F. Parker, Clinical Professor of Surgery, Medical College of S. C. "The role of epinephrin and norepinephrin in rebound cardiovascular phenomena following azygos flow studies and cardiopulmonary bypass in dogs."





**CHARLES F. KETTERING**  
1876 - 1958

Medicine has had few more devoted patrons and co-workers than Charles Franklin Kettering. "Boss Ket", as he was affectionately known to the thousands of people of General Motors, was an engineer whose contributions to the automotive age (the self starter, ethyl gasoline, high compression engines, diesel locomotives) won him renown as an inventor and a fortune estimated at many millions. A large share of that fortune, and also of his life, he devoted to medical research.

Writing on the occasion of the seventy-fifth anniversary of the American Medical Association he summed up the sense of kinship he felt for our profession: "... we must break down the boundaries between engineering and medicine . . . all of us, all the professions, are a part of one big work banding together to fight for every form of human progress."<sup>o</sup> He rebelled against pedagogical boundaries and the vocabularies of scientific jargon which separate workers with a common cause. His own achievements ranged through the fields of physics, chemistry and biology, in addition to his own. From his years of close association with physicians he learned much of medicine. And medicine can learn much from him.

"The Boss" had a genius for going to the core of a problem or an idea, reducing it to its least common denominator, and crystallizing his thoughts into "Ketteringisms" that reveal his pragmatist's philosophy. "In research the hard thing to recognize is that the problem you are working on is boss." Making a plea for an educational system which would teach students to "fail intelligently" he pointed out that "an inventor fails 999 times and if he succeeds once he's in." Most important, "the one time you don't want to fail is the last time you try."

If "Boss Ket" had a hobby it was debunking dogmas. "It isn't what we don't know that holds us back so much as the things we know for sure that are not

so." He made a sharp distinction between formal education and learning. "Real progress", he believed, "is made by those who are quite different from educated people. Facing an inscrutable disease, the men who make progress do so because they tend to throw statistics out the window and start with simple reasoning." Big words seemed to him only a camouflage of ignorance: "People think that if they have a name for a thing they understand it." Perhaps in no field of science is that more true than in medicine, where there is yet so much to learn.

But his greatest disdain was for the egotist. "Just the minute you get satisfied with what you've got, the concrete has begun to set in your head." To him the real trouble with the world was that "A few men want to be big shots and make everyone else serfs."

Since retirement from the active directorship of General Motors Research a dozen years ago, his time was devoted chiefly to three consuming interests. One was the famed Sloan-Kettering Institute which he and G. M. Chairman-of-the-Board Alfred P. Sloan established for cancer research, an interest which was no doubt spurred on by the death in 1946 of his beloved "Mrs. Ket" of cancer. A second became known as his "why the grass is green" investigation—he was always asking why—into the fundamental mechanism of the storage of solar energy by plants. This project was recently housed in a large modern laboratory building built by the Kettering Foundation on the campus of Antioch College at Yellow Springs, Ohio. The third interest he had pursued for more than fifty years, ever since his boyhood wonderment on the mystery of how a magnet can exert a pull on another object through space. The textbook explanation of "lines of force" which he was taught in his student years at Ohio State University did not quell his curiosity, which was insatiable and recognized no boundaries. Few people were aware that the trim white buildings located inconspicuously behind an Ohio farmhouse a few miles out of Dayton contained instruments for neutralizing the magnetic field of the earth and delving into properties of magnetism as yet unknown.

The tempo with which he pursued these projects was staggering. He commuted regularly between his home and New York City, Yellow Springs, and Detroit where he retained a position of leadership in General Motors affairs long after his retirement. Nearly all this travel was accomplished by air; he maintained three airplanes of his own and relaxed by taking over the controls from his pilots and flying himself, proud of the fact that he was one of the first licensed pilots in the United States and used to fly with his neighbors, the Wright Brothers. Occasionally there was time for a flight to "Far Horizons", the retreat which he built atop a knoll on the farm where he grew up near Loudonville, Ohio, or to Alabama or Florida for work on other research projects. He was still maintaining this schedule when, at the age of 82,

<sup>o</sup> J.A.M.A. 167:1360, July 12, 1958

In  
smooth  
muscle  
spasm...



- controls  
*stress*
- relieves  
*distress*

## Pro-Banthine<sup>®</sup> with Dartal<sup>®</sup>

**Pro-Banthine—**

*unexcelled for relief of cholinergic spasm—  
has been combined with*

**Dartal—**

*new, well-tolerated agent for stabilizing emotions—  
to provide you with*

**Pro-Banthine with Dartal—**

*for more specific control of functional gastrointestinal  
disorders, especially those aggravated by emotional  
tension.*

**Specific Clinical Applications:** Functional gastroin-  
testinal disturbances, pylorospasm, peptic ulcer, gas-  
tritis, spastic colon (irritable bowel), biliary dyskinesia.

**Dosage:** One tablet three times a day.

**Availability:** Aqua-colored tablets containing 15 mg.  
of Pro-Banthine (brand of propanthelinc bromide)  
and 5 mg. of Dartal (brand of thiopropazate dihydro-  
chloride). G. D. Searle & Co., Chicago 80, Illinois.  
Research in the Service of Medicine.

**SEARLE**

he died unexpectedly at home in Dayton, a few days before Thanksgiving.

Mr. Kettering was an earnest worker, a Lincoln-esque story teller with a dynamic, yet warm and friendly manner. His modesty was genuine. His wealth, acquired in the best American tradition, he regarded as a means of contributing to the progress of mankind. Characteristically he looked not to past accomplishments but to the future "because that's where we are going to be spending the rest of our lives." About that he was always optimistic: "With willing hands and open minds, the future will be greater than the most fantastic story you can write. You will always under-rate it."

Dale Groom, M. D.

---

## BOOK REVIEWS

---

*DIAGNOSTIC LABORATORY HEMATOLOGY.* Second Edition. By George D. Cartwright, M. D. Grune & Stratton, New York. 1958. 250 pages. Price \$6.75.

This manual is a concise review of the routinely performed laboratory procedures in hematology and is written for the student and practicing physician. Although there are more exhaustive works on this subject, the present book fulfills a very real need in this regard.

The subject matter covers all phases of diagnostic hematology in an easily understandable form with excellent descriptions of all tests and recommendations of the best one in cases where several methods are available. Each procedure is followed by the very important, though frequently overlooked, "sources of error" as well as a discussion of the variation in a given determination that can be expected even with good technique. Although many of the tests described would not be done either by a student or a practicing physician, they are of great value in interpreting information reported by the hospital laboratory.

Dr. Cartwright, in his exhaustive work in hematology for the past fifteen years, is very well qualified to write such a book and it can be very highly recommended to both student and physician as a valuable reference work and guide to the simple, as well as more complex routine laboratory studies in hematology.

Charlton deSaussure, M. D.

*DIABETES AS A WAY OF LIFE*, T. S. Danowski, M. D. Coward-McCann, Inc. New York 1958. Price \$3.50.

The most important feature in the management of a diabetic patient is the education of the patient. The more the diabetic knows about himself and his disease the better he gets along, and as an aid in the education of the diabetic this book is very useful. It is written altogether from this point of view, and ex-

plains many of the aspects of the disease in simple, non-technical language.

The best criterion for the usefulness of such a book is not for the physician himself to decide, but for the patient; I will therefore quote the comments of a patient who has read and reviewed the book himself:

"This book appears to me to be one book that lives up to its title, 'Diabetes As A Way of Life'. The author begins by showing that the diabetic is not alone but about two per cent of the population are diabetics. He then proceeds to discuss quite frankly the emotional aspects of the discovery of diabetes, the shock of its discovery, the frustration, and the difficulties encountered because of the psychological attitude of the new patient.

Dr. Danowski then deals with the various treatments and control of diabetes, always reassuring the patient that all is not hopeless, but that through proper understanding of the disease by the patient and the care of a competent physician, as well as a willingness on the part of the patient to accept his new way of life, that life can indeed be fruitful.

The writer does an excellent job of discussing acidosis and coma, insulin shock, and special problems in the life of a diabetic. It is my opinion that every diabetic should read these chapters. He answers many questions that plague most diabetics and deals realistically with mental attitudes and expectations. The book is written in language that the average layman can understand."

The book is scientifically sound, does indeed contain a wealth of useful information, and can be recommended to the patient as a distinct help in his diabetic education.

Robert Wilson, M. D.

---

*PSYCHOPROPHYLACTIC PREPARATION FOR PAINLESS CHILDBIRTH.* Isadore Bonstein, M. D. Grune and Stratton, Inc., New York. 1958. Price \$2.50.

This little volume represents still another effort on the part of obstetricians and gynecologists the world over to conduct pregnancy, labor, and delivery with minimal usage of drugs, either analgesics or anesthetics. From this standpoint, it has great value. Whether or not one wishes to espouse the psychoprophylactic method of painless childbirth, or the "childbirth without fear" method, or the method derived from hypnotism and suggestion is still a highly individual problem, both to patients and to obstetricians. The book is well documented, consists of several lectures on the subject of muscular relaxation and its relationship to the process of labor; but it is my opinion that it is much too technical to be of much value to the patients themselves, even with a rather close teamwork with the obstetrician and his various hospital assistants. The question of the minimal use of drugs during conduct of labor has plagued physicians for many years. Certainly one desires to make the experience of motherhood a great achievement for



the patient, and at the same time to lend that degree of assistance that will minimize the discomfort which must arise as a result of this physiological process. The manual is not suitable for patient education in my opinion.

Patricia A. Carter, M. D.

*THE ESSENCE OF SURGERY*, by C. Stuart Welch, M. D. and Samuel R. Powers, Jr. M. D. W. P. Saunders Co., Philadelphia, 1958. Price \$7.00.

This book might have been titled as an introduction to surgery since it is a consideration of the entire field in a manner designed to appeal to the surgical beginner. The title is derived from the theme that there is a fundamental sameness to the relatively few different types of injury. The authors emphasize that the province of the surgeon is the management of acute injury and the same principles are used in the various branches of surgery.

The book is divided in three parts concerning the background of surgery, the major surgical injuries and operative surgery. The section on the background of surgery includes a short surgical history, a delineation of the surgeon's place in medicine and the response of the body to injury. The major surgical injuries are categorized as loss of body tissue, loss of body fluids and infections. Pre-operative and post-operative care are given their proper emphasis. The section on operative surgery presents a discussion on the basic procedures in surgical technique, rightfully but infrequently included in introductory texts. The classification of operative surgery into extirpative, reconstructive and physiologic should be helpful to the student in obtaining a elementary grasp of the art.

The subject matter of the book is thoroughly up-to-date and the role of the modern surgeon in a non-operative capacity is properly presented. Superficiality is difficult to avoid in such a comprehensive condensation, but the authors have done as good a job as any. One cannot envision interest in this book beyond the student level. It should serve well as a text in the introductory surgical lectures.

Louie B. Jenkins, M. D.

*DISEASES OF THE ESOPHAGUS*, by J. Terracol and Richard H. Sweet, W. B. Saunders & Co., Philadelphia and London, 1958. Price \$20.00.

This work consists of about 600 pages of text, including 408 illustrations. There is an appendix on the composition of diets and tube feedings for patients with esophageal disease. Also there is a very exhaustive bibliography, though not complete, on all phases of the anatomy, physiology, the roentgenographic and endoscopic observations and diseases of the esophagus, the like of which cannot be found elsewhere in such a convenient form.

The work consists basically of a translation by Dr. Sweet, Associate Clinical Professor of Surgery at the Harvard Medical School, of the original work in French by Dr. Terracol, a Professor of the Faculty of

Medicine of Montpellier, France. In addition, the treatise has been brought up to date, so to speak, to include newer knowledge and particularly principles and techniques involved in the surgical treatment of diseases of the esophagus. Whereas some of the opinions expressed are controversial, in general the book is certainly a splendid reference source for all diseases of the esophagus, representing the experience of two of the foremost authorities in this field. It can be recommended highly for the generalist and for the specialist faced with any problem concerning the esophagus.

Edward F. Parker, M. D.

*CORRELATIVE NEUROANATOMY AND FUNCTIONAL NEUROLOGY*. Joseph G. Chusid, M. D. and Joseph J. McDonald, M. Sc. M. D. 9th Edition, Lange Medical Publications—Los Altos, Calif. 1958. \$4.50.

This is the ninth edition of *Correlative Neuroanatomy and Functional Neurology* since 1938 and this fact alone speaks eloquently for this excellent handbook.

It is difficult to fault this book which is intended for the beginner in neurology and as an aid to the text and neurological literature. In this it succeeds admirably. Yet it is a pity to see almost nine pages devoted to eponyms.

Some of these eponyms cannot lightly be discarded by reason of their admirable precision such as Hippocrates ominous sign in acute infection, but most should and could be eliminated and replaced by precise titles in terms of pathology. The nightmare of eponyms grows when the names become hyphenated as in the Laurence-Moon-Biedl syndrome; if we are to be just to all of these clinical observers of syndromes as Shapiro states about the Laurence-Moon-Biedl syndrome this familial idiocy should idiotically be designated the syndrome of Laurence-Moon-Bardet-Biedl-Solis-Cohen-Weiss.

B. O'Connor, M. D.

*CIBA FOUNDATION SYMPOSIUM ON THE CEREBRAL FLUID*, Editors: Cecelia O'Connor, B. Sc., and G. E. W. Wolstenholme, M.B.B.Ch. Little, Brown & Co. Boston 1958. \$9.00.

This symposium is a welcome edition to the American library where such excellent books as Elliot-Page and Questels "Clinical Dynamics of Brain and Neurology" discuss the intra-cranial fluids and so often do not consider or compare their views with quite opposite views held elsewhere in the world. In this review, in the manner unique to the Ciba Foundation Symposia, the fundamental considerations of the cerebral spinal fluid are discussed by international authorities and co-related with clinico-pathological observations to determine the most rational modes of treatment.

E. R. A. Cooper's contribution to the nerves of the meninges and choroid plexuses is of special interest

and beautifully illustrated and from her work it appears reasonable to assume that the majority of the meningeal and choroidal nerves are so closely associated with vessels that they are predominantly vasomotor in function; this may prove to be the key to the mechanics of the concussion and de-acceleration head injury headache.

Many basic problems are left unanswered and with contradictory opinions; this is a certain stimulus to more intense work and we hope that it will not be long before Ciba will hold a further meeting on this basic problem of clinical medicine.

B. O'Connor, M. D.

**REHABILITATION IN INDUSTRY.** Donald A. Covalt, Editor—Grune & Stratton, New York, 1958. \$6.50.

This is the third in a series of "Modern Menograpgs in Industrial Medicine". It consists of eleven fairly brief but generally well written chapters by different authors. Various types of frequent industrial injuries such as amputations, soft tissue injuries, peripheral nerve lesions, back injuries, and several others are discussed. Emphasis is placed on the necessity of a specific treatment program from the time of injury to the time of maximum recovery and return to work. The importance of psycho-social and emotional aspects, especially in low back injuries, is presented somewhat briefly. The final chapter is devoted to vocational placement of those with permanent disability.

This is a well prepared book and offers a clear concept of the overall problems of rehabilitation in industrial cases as well as specific forms of therapy.

Harry W. Mims, M. D.

**ACTION OF RADIATION ON TISSUES—AN INTRODUCTION TO RADIOTHERAPY** by A. La Cassagne, and G. Gricouroff. Second Edition. Translated by Clarence C. Lashbaugh, M. D. and Gretchen R. Riese, M. S. 200 pages. Grune and Stratton, Inc., New York, 1958. Price \$6.25.

This book is essentially a compilation of abstracts of early observations and experiments concerning the biological action of ionizing radiation. It is valuable as a history, and as a reference book if one wishes to determine how present conceptions of body reaction developed. The research reviewed and condensed was done chiefly from 1900 to 1940. Those wanting to review a phase of radiation reaction will find it helpful as a guide, particularly in the European literature.

Unfortunately one cannot judge the accuracy and thoroughness of the work reported on, and some of it may prove to have been surprisingly superficial. The conclusions reached in this early research are interesting and informative, but specific findings should not be accepted without reading the original articles.

For example, Bergonie and Triboudeau in 1906 summarized the investigations up to that time and established three laws which stated that radiation acts more intensely on cells: (1) when the reproductivity activity of the cells is greatest, (2) when the mitotic process is prolonged, and (3) when differentiation and functions are less definitely established or fixed.

Recent work has cast considerable doubt as to the validity of this research and the resulting "laws" which have been accepted for over fifty years.

There is a need for a good textbook on radiotherapy for the radiology resident, but this does not seem to me to be it.

Harold S. Pettit, M. D.



**REID'S**

**VITAMIN DROPS**

Each cc. contains:

Vitamin A palmitate	4,500 U.S.P. Units
Vitamin D calciferol	1,000 U.S.P. Units
Ascorbic Acid (C)	75 mg
Thiamine	14 mg
Riboflavin	24 mg
Niacinamide	140 mg

REID LABORATORIES, INC. ATLANTA 14, GEORGIA

# The Journal

of the

## South Carolina Medical Association

VOLUME LV

February, 1959

NUMBER 2

### THE DELINQUENT

BERNARD L. PACELLA, M. D.  
New York, N. Y.

**T**he topic of The Delinquent can be a very wide one indeed, including all varieties of adult psychopaths and criminals and the juvenile delinquent. I will, largely, localize our discussion to the latter, and ask your indulgence if my presentation is informal rather than organized and didactic.

The juvenile delinquent may perhaps be illustrated by a story I recently heard which is not necessarily factual. At any rate, the story has to do with Billy, a 14 year old boy, who, because of his delinquent behavior, apparently had made life pretty difficult for his parents; he was a very aggressive child, always getting into trouble, especially with the school authorities and the teachers. However, he was likeable in a way, a leader among the tougher boys in the area, very strong, a good athlete, and fortunately, an excellent swimmer. He was considered to be quite matter of fact and stoical in the way he reacted to punishment or unfortunate situations. It seemed that shortly after his father died, his mother remarried and Billy continued to make life pretty difficult for his stepfather. The latter was a rather kindly person and was at a loss to know what to do; but it seemed that after a period of time his patience began to wear thin as Billy continued with his incorrigible behavior. One day Billy walked into a local barbershop looking extremely exhausted and completely drenched. He sat in the barber chair and curtly requested the barber to give him a hair cut. The barber was rather curious

and initiated the conversation by asking: "How are things going along, Billy?" Billy replied, "Fine". "You look tired." Billy said, "Yep". "How are things at home?" "Fine." "How is your new dad?" "Fine." "Do you like him?" "Yep, sometimes". "Is he nice to you?" "Yeah" "Does he ever take you out?" "Yep" "When did he last take you out?" "Oh, he just took me out on the lake". "How did you get so wet?" "He wanted to see how good a swimmer I was. He's a fine fella. He took a day off just to row me out to the middle of the lake and then he let me out of the boat to see if I could swim back alone." He paused, then the barber said, "Well, you look pretty tired. Must have been a rough swim?" Billy added, "Naw, just a little tough at the beginning until I got out of the sack."

That is the stoicism of the delinquent—some of them.

In general, delinquent behavior includes all varieties of misconduct, including asocial, anti-social and aggressive behavior. When we talk of a juvenile delinquent, we more or less refer to the prepuberty and adolescent child. Prepuberty involves the ages between 11 and 13, while adolescence is generally considered to extend from 13 to 20 years of age. The causes of delinquency are varied and many, but perhaps we can examine a few etiological factors. The age-old question of how much heredity and constitution play a role on the one hand, and how much external environment and training on the other hand, is still in the debatable phase. Much attention has been given to this question, and there is some divergency of opinion for certain type problems, but gen-

Presented at the Tenth Annual Institute of Neurology and Psychiatry, Medical College of South Carolina—March 21, 1958.



erally speaking, it would be safe to say that there is always an interaction between the various forces of heredity and the environment. Years ago, Cesare Lombroso, a professor of psychiatry at the University of Turin, Italy, felt that he could tell a criminal by the character of the prominences on his head. He believed that there was such things as inborn criminals and wrote much concerning the special characteristics of criminal types. Some later psychiatrists whose names are prominent in the field, as, for instance, Kraepelin, believed also in the inheritance of criminal traits. However, with a better understanding of psychopathology and psychodynamics, there has been a shift toward a more psychologic approach in considering the causation of delinquency and, therefore, more stress placed upon the environment. Freud himself, in speaking of the problem of delinquency and psychopathy, after evaluating many of the factors, felt that it was essentially very unclear as to what the etiology was in so many of these problems. He seemed to be definite on one score—he stated that if we can not see clearly the positive factors, at least we can see clearly the obscurities. However, he did talk of somatic compliance—that, given a certain constitution, it may respond to specific factors in the environment more readily than another constitution. This, of course, is very much the attitude that most of us take today. Freud summed it up very nicely when he concluded that it was not a question as to whether a mental condition is organic or functional in origin, but rather it is a question in each instance as to how much organicity and how much psychogenicity.

A number of studies investigating the causes of delinquency have been conducted along different lines of approach and I might mention a few. From the point of view of heredity, Lange, some years ago, studied a large group of individuals and felt that there was more than 6 times as much "hereditary taint" in the relatives of delinquents and psychopaths than there was in normal control groups. On the other hand, more recent studies have shown that in the normal control groups, as much "hereditary taint" was found as in the delinquent groups. So the hereditary factor did

not seem to play much of a role in these more recent studies. Dr. Kallman, who has done considerable work on identical and non-identical twins, conducted a series of studies on such delinquent twins and found no correlation between hereditary factors and delinquency. He found, though, an interesting thing, that the offspring of persons who had been delinquent and psychopathic were more prone to develop emotional disturbances than the siblings of the delinquent. He attributed this observation to the fact that the delinquent parent or the delinquent who becomes a parent is more prone to be unstable than the sibling who may not be delinquent or psychopathic and therefore provides an environment which is fertile for the production of psychopathy in the offspring. Other than hereditary studies, there have been studies on the constitution of the delinquent psychopath. Sheldon has been in the forefront of these investigators and developed techniques and standards for taking measurements of body build, more or less along the lines of Kraepelin's work. With Eleanor Gluck, he studied over 500 offenders, and concluded that the delinquent has a mesomorphic body build—more prone to be muscular, strong and athletic. There seems to be some confirmatory evidence for these observations, but the work has by no means been definitely confirmed. Neurological deformity or organic central nervous system pathology, may be etiologic in some delinquent behavior and this will be discussed shortly.

Neurophysiologic experiments have been of some interest in studying aggressive reactions in animals. Marked aggression, for instance, can be induced by certain brain lesions, particularly lesions in the hypothalamus and the thalamus of dogs and cats. These regions can be cut off from the higher centers resulting in a so-called "thalamic animal", which exhibits rage reactions on the slightest provocations or stimuli. Other neurophysiological studies have been conducted along electroencephalographic lines in many groups. Some people feel that there are significant EEG findings in the delinquent while others disagree. We might state that, in general, a large delinquent group tends to show about the same incidence of abnormal EEGS as we will find

in a similar large group of psychiatric patients. Of course, if the delinquency is related to actual organic disease of the brain, then we will get a much higher increase of EEG abnormalities in these delinquents.

With respect to the psychologic factors which may be etiologic in delinquency, it seems that in most of the studies done in recent years, there is a general uniformity of opinion on one important factor, namely, the matter of rejection. The elements of rejection operate most crucially during the first 5 years of life—even the first 3 years of life are enough to affect the psychologic structure of the child so that it creates the groundwork for the subsequent development of delinquent behavior. A feeling of rejection leads to all kinds of aggressive reactions on the part of the child and stimulates the unusual development of aggressive drives. This rejecting environment therefore seems to be the etiologic nucleus of delinquent reactions according to many psychological studies. Characteristically, these children develop impulsive, assaultive or aggressive behavior with the pleasure-pain principle remaining dominant and not modified adequately by proper conscience formation nor the development of adequate social behavior. Ego controls over instinctual strivings (aggressive and sexual) are lacking, and there occurs an intolerance of any frustration. Hypermotility and restlessness are frequently characteristic. The feeling of guilt is considerably reduced, often to the vanishing point when it involves relationships with authoritative figures.

We have thus far mentioned hereditary, constitutional and psychologic factors which may be causative in the delinquency reaction. There is also a sociological field that has become of increasing importance in research investigations. We know relatively little about the sociologic implications as yet, but some of the studies have indicated that social crises, particularly wars, the aftermath of wars, and depressions tend to increase the incidence of delinquency. During these times it is felt that families are dislocated, parents are under increased tensions, fathers may be away or out of work, etc., the families have less desire to have children and if one comes along it is a

burden. These are negative factors which increase elements of rejection. Sociological studies have further found that class structure might be related to delinquency; statistics have indicated that delinquency is more prevalent in the groups of lower socio-economic levels and lower educational levels. From the point of view of the complexity of a society, it is felt by some sociologists that the more technologically complex a society is, the less the incidence of delinquency. This is disputed by other sociologists who have felt that the reverse is true. I might refer here to an interesting study by two sociologists who collaborated in studying four different small communities in the Blue Ridge Mountains. Two of them were becoming more technologically advanced, the other two were remaining fairly static and isolated. They discovered that in the static isolated communities, delinquency was less of a problem than in the other two communities which were spreading out and becoming more technologically advanced. In talking recently with one of the assistants at the American Indian Museum in New York, which does considerable field work with the American Indians on their reservations, I was informed by him that his personal observations led him to believe that where Indians became surrounded by communities of white settlers, where there was some intermingling, there occurred an increase in psychopathy and delinquency amongst the Indians. Civilization and culture are perhaps not the only things we brought to the American Indian!

I would like to proceed to the more specific delineation here of diagnostic categories and groups. We might divide delinquent children into two general categories, those of the organic type and those of the functional type. It is an old-type classification in psychiatry, but like old whiskey, is well taken only up to a certain point. The organic group is characterized by a general syndrome which is best described as the "organic type of delinquent syndrome". In this group we find particularly the children who have borderline IQ's or who are at the high-grade moron level or even the low average level, so that the intelligence quotient of this group ranges from between 70 to 100. As you know, IQ's up to 25 categorize the



idiot, 25 - 50 the imbecile, 50 - 70 or so, the moron; 70 - 80 is the borderline group while 80 - 120 is considered the average normal range. The idiots and imbeciles usually are institutionalized and, therefore, do not present a problem since they have generally little contact with the community. Thus, behavior-disordered children who are essentially of lower average, borderline or high grade moron levels can be considered as generally intellectually inadequate or relatively so and comprise a sub-division of the organic-type behavior disorders. Frequently, the awareness by these children of their intellectual inadequacies creates varied neurotic reactions, often with pronounced aggressive components. They may be rejected by their families from early childhood levels because of their poor developmental and performance levels, and react to this rejection by manifestations of anxiety and hostility. The actual organic cerebral component may inhibit maturation not only of intellectual functioning, but also of emotional functioning; there may be actual deficiencies in the thalamus and hypothalamus, plus the association pathways to higher centers. There may be perceptual dysfunctions, and defects in conceptual development, with impairment of judgment, and an inherent inability to adequately control instinctual drives and expressions, accounting perhaps for much of the impulsive sexual and aggressive behavior.

A second organic-type behavior disorder is the post-encephalitic child; the third organic type is the post-traumatic. There are other types, such as the epileptic or certain children with endocrine deficiencies, and so on, but we will not discuss these other groups specifically.

In the organic group of behavior disorders as a whole we speak of the "organic syndrome". This is manifested by hyperkineses, hyperactivity, impulsive and assaultive behavior or aggressive acts in which the aggression or the assault is out of proportion to the precipitating agent. Some slight irritant might set them off. Interestingly enough, they will often show remorse for the aggressive act. This is in contradistinction to that which we find in the aggressive neurotic child who has no organic cerebral disturbance or defect, and who usually shows no remorse for his aggressive

action. The "organic" child will commit some violent act suddenly, on the impulse, then later feel genuine remorse. It just seems they cannot control the impulse.

The post-traumatic "organic" child is not as commonly seen as the post-encephalitic one. It should be emphasized that a history of a behavior disorder or delinquency following soon after a severe trauma, is more often neurotic rather than organically determined. But still there is a group of children who give a history of having been model children before a head trauma and then after the accident developing highly delinquent behavior as though suddenly they are unable to tolerate frustration and react impulsively with uncontrolled aggressions. They seem to lose judgment and social and moral values. The symptoms are similar to those which prevail in the other organic types of delinquency.

The post-encephalitics at times may be very dangerous individuals, particularly if they have a tendency to be assaultive—homicidal or sexually assaultive. They are very difficult to treat and the prognosis is generally poor in these children. The "post-traumatic" as a general rule seem to have a better prognosis. Very likely the physiology and the histology of the brain may not be as permanently altered in the traumatic process as in the encephalitic process.

All varieties of therapy have been tried for the organic behavior disorder. Perhaps the only kind of therapy for the more dangerous of the group is institutionalization and an attempt to retrain some of the children in milieu or group therapy. Individual psychotherapy may be helpful in the less damaged cases, where the organic component is not too excessive. Pharmacological agents, such as benzedrine or dexedrine or the tranquilizers may be very helpful. Paradoxically, dexedrine or benzedrine may be used either for the hyperactive children, where it sometimes reduces activity and exerts a calming effect, or for the very sluggish child, where it may tend to act as a stimulant and produce greater activity. Tranquilizers belonging to the promazine group, or the meprobamates may be very helpful. My opinion with respect to shock therapy is that it is rarely helpful in these children. Dr.



Loretta Bender apparently is of the opinion that in some of the very aggressive children, shock therapy was effective in reducing the severity of the aggressions and the hyperkinesis. Many child psychiatrists believe that shock therapy has no place in the treatment of children's disorders.

I might add that in the study which Dr. Jenkins and I undertook some years ago in a group of delinquents at the New York State Psychiatric Institute, we found that the "organic type" behavior disorders showed abnormal electroencephalograms in about 70% of the cases. Thus, the electroencephalogram may be useful as an aid in diagnosing organic factors in these behavior disturbances.

The second major division of delinquents, namely, the "functional" group of disorders, may be subdivided into essentially two separate types:

First, the chronically aggressive child;

Secondly, the child with neurotic conflicts leading to delinquent behavior.

The first type, the chronically aggressive child, is often referred to as having a conduct disorder. There frequently is a characteristic history obtained in these children, as was well brought out by the observations of Van Ophuysen in New York. It is characteristic for parents to say that ever since the child has been able to get about quite adequately, let's say after the 2nd year of life, he has been the "enfant terrible". He is extremely active and restless, constantly on the go, and getting into trouble, does not persist in playing with any one thing for any length of time, and if there are siblings, he will try to provoke or hurt them. As he develops and grows, he becomes more assaultive and more aggressive, constantly fighting or attempting to dominate or assert his physical superiority over other children. When he enters school he becomes a difficult problem for the teacher, will play hooky, steal and lie. He may become a member of a delinquent gang, and perform anti-social acts against the community. We note that the aggressions are not localized either to the home or the school or the community, but are directed against all areas of the environment. If we were to visualize dynamically the psychic structure of this person in terms of id, (or in-

stinct), ego, and superego (conscience) we would find that the superego is relatively small, while the ego and the id are tremendous. Thus strong impulses from the aggressive and sexual drives, and a strong ego are being inadequately controlled by a weak conscience. These children, for the most part, come from deserted or broken homes, but one element always prevails, the element of rejection by the parents. Oftentimes there is a history of these children going from one foster home to another, never getting along in any home regardless of the kindness of the foster parents. The children are always creating problems and trouble, for the community, the foster parents and the school.

In normal development, we find that children will begin to tolerate frustration in order to obtain the love of the parent, particularly the mother. It is a kind of barter arrangement in which they surrender the gratification of impulses to receive approval by the parent. If they feel rejected by the parent, there is no point in giving up anything, and therefore no barter arrangement exists. Thus, they continue to indulge their pleasures and employ their instinctual drives, particularly the aggressive ones, in order to maintain and expand their own egos, and gratify their own narcissism which has been wounded by parental rejection. They continue to function for a longer period of time on the pleasure-pain principle; what is painful is no good and what is pleasurable is good. This interferes to some extent with the development of the reality principle and the reality testing function and as a consequence these children develop tremendous egos which are highly narcissistic, highly self centered and interested primarily in gratifying their instincts and their impulses, aggressive and sexual, but mostly aggressive in their earlier years. They prefer self-gratification rather than the establishing of better human relationships. The parent tends to represent the outside world, including the school and the community and, therefore, they come to transfer their aggressions and hostility from the parent to the outside. The electroencephalogram in this chronically aggressive child shows an interesting finding; although the EEG pattern shows no unusual incidence of abnormality beyond that

which is seen in the neurotic child, the alpha frequency spectrum tends to be decidedly on the slow side as compared with the alpha frequencies in the neurotic or clinically normal child. We might construe this observation as suggesting a constitutional predisposition to the development of excessive aggression, or lack of maturation for the proper controls over aggression; this constitutional feature, combined with parental rejection, could be important or crucial etiological factors for the production of delinquency.

The I. Q. of the chronically aggressive child, tends to predominate in the 80 to 100 range. The average range, as we mentioned previously, is between 80 to 120. These children also frequently show specific disabilities of one variety or another. The specific disabilities include impairment of reading, writing and speech; these functions may be delayed or show distortions in development. However, we may find that children of high intelligence also show these specific disabilities, so that they do not necessarily go along with lower intelligence. But an impairment in any of these functions may act as a very frustrating experience for the child, increasing his hostility and aggression.

Another symptom commonly seen in the child with the conduct disorder is enuresis. Some persons feel that there is a constitutional factor in enuresis; many believe it is an indication of unconscious aggression. Perhaps both factors play a role. But in any event, the enuresis subsides generally about the age of 13 or 14.

Permit me now to summarize the symptoms of this chronically aggressive delinquent child. Characteristically, we see the impulsivity of their reactions, the assaultive aggressive behavior of a chronic type, diffusely directed towards all areas of their environment including the home, the school, and the community; there is the relative absence of conscience in which these children are sorry only that they have been caught, but not sorry that they have committed the misdeed. There seems to be an impairment of judgment and reality functioning; we might say also a lack of social maturation. There is an inability to tolerate frustration while the sudden impulse behavior indicates

an absence of delay in reaction which is the immature type of reaction. These children oftentimes seem to function as though society is entirely hostile, as though any one in authority is a threat to them. They commit their delinquencies without regard for society or the community, and the lack of judgment leads them to repeat their acts in spite of punishment or threats of punishment. This child is to be differentiated from the child with a compulsive masochism who is neurotically driven to repeat his delinquency for purposes of provoking retaliation or punishment. Thus, his aggressive or sexual drive is gratified, but at the same time he reduces his guilt and thereby appeases his conscience or super-ego by receiving punishment.

The treatment of this group is difficult. Individual psychotherapy performed outside the setting of an institution usually accomplishes relatively little. Analysis is practically out of the question for these children. Perhaps the usually preferred program is "milieu therapy", which was developed shortly after the first World War by August Aichorn. He created one of the first well-managed homes for delinquents in Vienna and applied the principles of dynamic psychiatry in the handling of these children. It is of interest to mention here that sometimes when a dramatic situation occurs in therapy a patient develops a sudden awareness and insight into the psychologic problems related to their symptoms or behavior. Aichorn was a master in creating dramatic moments and handling them for their therapeutic effect in the treatment. He would surprise the child by psychologic maneuvers, remove his guard, and drive a telling point home. I will illustrate this with a story of one of Aichorn's delinquent charges in the institution. This boy was in charge of the little candy counter at the home, where he sold candy to the other boys. Each day, he managed to pilfer some of the money from his receipts. After a period of time, Aichorn found out that there was some inaccuracy in the financial accounts and so he brought the boy to his office, sat him down and asked him about it. He seemed very matter of fact about it, simply asking the child how much money he had taken in each day, at what time of day he took in the most money and finally



indicating that there was discrepancy in the accounts. The boy pretended to be disinterested in the conversation, until Aichorn suddenly remarked "I guess we will have to go see your parents." The boy grew pale and dropped a book which he had been holding. Aichorn asked the boy what was wrong, to which he replied "Nothing". Aichorn quickly said "What about the money?" "How much is missing?" With this he drew out some money from his own pocket. The boy was trembling by this time and finally confessed how much was missing. Without saying a word, Aichorn counted out the money from his pocket, gave it to the boy and said "This makes up the change". He dismissed the child, who walked out of the room in amazement. Rather than receiving all kinds of admonishments, he had suddenly received a rather odd kind of treatment, without punishment or lecturing. A couple of hours later the boy returned, very tearful, admitting everything. It was this kind of dramatic situation that Aichorn used or even created to develop a feeling of emotional rapport and identification with himself. He was unusually successful in treating delinquents, but undoubtedly his personality and empathy for the delinquent played an important role in this success. Following Aichorn I might mention that a number of others tried to further develop this milieu therapy, as it was called. For instance, there was the Arthur Jennings School in Chicago, and for a period of time, Pioneer House in Detroit, which is not functioning at the present time, and the Hawthorne School in New York.

Milieu therapy may be described as a form of group therapy or group activity. The children learn to identify with a counselor or cottage parent with whom they develop a close relationship. Once they begin to show guilt reactions to the group or to the counselor you have an indication that therapy is becoming effective; they are beginning to re-establish or establish adequate object relationships and identifying with the ideal objects—they gradually give up the complete functioning in accordance with the pleasure principle and learn to tolerate some degree of frustration. Once they identify with the group, they become sensitive to criticisms or sanctions against

them from its members and soon experience a strong group spirit. This is soon followed by a closer rapport with the counselor, who is identified as the head of the group. With the development of this kind of preliminary phase of treatment, the child becomes much more amenable to individual psychotherapy.

The second subdivision of the functional group of behavior disorders includes the neurotic child, who commits misdeeds and delinquencies on the basis of his neurotic conflicts. The clinical differentiation from the conduct disorder child (chronically aggressive) is sometimes difficult. However, the neurotic child does not manifest early hyperkinesis and aggressive activity, but may not develop any of the delinquent traits until he is in his latency period of development, namely, between the ages of 7 and 11. At this time he is beginning to be a pretty big boy, is beginning to "feel his oats", and finds that he is able to discharge his hostility against the ambivalent object or substitutes. The more delinquent behavior blossoms out in the prepuberty and puberty-adolescent phase; at this time, the unconscious conflicts and instinctual impulses are stirred up by the bloom of adolescence, the child becomes increasingly aware of sexuality and the increasing surge of libidinal impulses makes it more difficult for him to handle his conflicts. If the environment does not offer sufficient interests for him, he will reactivate old conflicts related to rejection or fantasied rejection by the parents, and project his own accusations of guilt onto the community. In other words, the community now tells him he is bad instead of his own ego telling him that he is no good. Therefore, he has to fight the community, he has to fight authority and at the same time provoke situations to justify the gratification of his own pleasure wishes, while at the same time appeasing his conscience through punishment.

One important factor, which has been considered to be very specific in producing delinquency of the neurotic type has been the vacillation of the parent from an over-indulgent to a frustrating parent. One minute they are hugging the child, the next minute beating him, or vice versa. This vacillation and inconsistency in handling the child have been



associated with the development of this neurotic delinquent structure. We also find that if parents themselves have violent scenes, are assaultive, lie, steal or betray the child, then obviously the child will, at least partially, identify with the parent and incorporate some of this behavior into his own patterns of adjustment.

I might mention a type of delinquent child who is not anti-social, but more asocial and psychopathic in his behavior; more passive in his behavior than the real aggressive type, but exhibiting delinquent behavior with a neurotic character structure, where there was little conscience and tremendous narcissism. This is a boy, who at 16 began to sign checks only in his father's name, and gambled excessively. Finally at 18 he entered the army and as a result the father was very much relieved. After a period of time in the army as a private he decided to impersonate an Air Force Colonel and made matters a slight bit difficult for lower echelon officers at one of the bases. He had quite a time for a day or two and then suddenly left the base when there was imminent danger that he would be exposed. He could not be found, no one knew from whence he came or to where he went, and in the meantime he had been AWOL from his own base. He finally appeared at an important social function where only generals and very "top brass" attended; he was the only "Colonel" in the party and finally the MP's apprehended him. Because of the fact that he was diagnosed as a psychiatric problem, he was discharged from the Army on a medical disability. About 6 months after his discharge, he again impersonated an officer, but this time decided not to exceed the rank of Captain. He again created a turmoil in one of the bases, but was again picked up, jailed for a while, then permitted to go free from prison. A year later he again impersonated an officer. Thus we see here a constant repetition or compulsion of this acting out of a fantasy. When it became difficult for him to impersonate officers, he became a Don Juan and acted out other fantasies. He proposed marriage to many different girls and when they consented and plans were completed for a wedding, he left them waiting at the altar. He often would tell these girls during

the courtship that he was a son of some member of royalty in England, and, in fact, developed quite an English accent and air about him. Yet he was always fully aware of the true realities, and, in fact, when caught by his father or the district attorney, (especially for bad checks which he signed in his father's name) would break down, "confess his sins" but ultimately resume his fantasied existence which he acted out in a neurotically delinquent manner.

Neurotic delinquency may be acted out in a highly localized way, as for instance only in relationship to a parent or parent surrogate. The offense may vary from minor misconduct, as tantrums and disobedience, to actual murder of the parent. During the pre-puberty phase, the misdeeds may not be too serious; the child may be frequently truant from school as an expression of hostility to the parent, although, of course, there are other reasons for truancy. He may lie and steal money only from the parent, and yet be an ideal child in school and in his relationships with other persons outside the home. This "localized" expression of neurotically-determined delinquency, directed only or primarily towards the parent, is in contrast to the delinquency of the chronically aggressive (conduct disorder) child, who directs his aggressions towards all areas of the environment, as the home, the school and the community.

As the neurotic child grows older and enters puberty, he may become more defiant, and his misdeeds more serious. Because of the increase in sexual awareness and strivings during puberty and adolescence, he may discharge his conflicts via sexual aggressions. He identifies himself more as an independent, free-thinking person, shifts his resentments from parents to all other parent-surrogates, or all adults and authoritative figures in the environment, and embarks on an incessant crusade of defiance towards established institutions, rules and laws. Thus, his stealing becomes more serious, and his aggressions may turn into serious assaultive or homicidal behavior. In such instances, it frequently becomes difficult to differentiate between the conduct disorder and the neurotic type delinquency, although the history of the child's past behavior, the char-

acter of the home and the child-parent relationships may give important clues to the diagnosis. Manifestations of anxiety, such as phobias, obsessive-compulsive phenomena, tics and hysterical features are more commonly seen in the neurotic delinquency, and their presence may be helpful in differential diagnosis.

During their adolescence, the delinquent child is prone to join gangs who organize for both defensive and aggressive purposes. They defend themselves against fantasied aggressors or other gangs in the area, while at the same time asserting their superiority in a specific locale where they wish to be the accepted masters. By thus unconsciously identifying with the aggressor they alleviate many anxieties resulting from fantasied threats from this aggressor, (originally the parent); at the same time, by identifying with the gang or an admired strong leader, they become invincible supermen. In some sections of cities, a child finds it necessary to join a gang only for the purpose of conforming to the group and being accepted by them, even though he is not himself a delinquent problem. This might be termed "imitation delinquency" and is much more readily treated than the other forms.

Sometimes, members of the group are addicted to drugs, and induce others to begin the use of the drug, which then gradually leads to addiction. In such instances, the physiological craving may drive the adolescent into all sorts of crimes in order to obtain enough money to buy the drug. These cases become very difficult to treat and frequently require institutionalization.

A rarer form of neurotic delinquency consists of compulsive stealing (kleptomania). The objects stolen are generally inconsequential, and may have symbolic meaning, much as a fetish. The act of stealing under such conditions, is often accompanied by a feeling of excitement somewhat akin to a sexual "build-up". Kleptomania is not very common in the child, but more prevalent in the adult.

Another form of stealing, other than those mentioned above, is done for the purpose of obtaining and offering gifts to friends in order to please them. This type of stealing is more prone to occur in lower IQ children and in the

more passive and dependent type of child.

In treatment of the delinquent child, whose misdeeds are of "functional" origin, the type of delinquency must first be assessed. Comments regarding therapy have already been made for the chronically aggressive child. In the more genuinely neurotic type of person, individual psychotherapy may be very helpful, and is generally preferred to treatment in an institutional setting, except where drug addiction and uncontrolled serious kleptomania are present. Sometimes, it becomes necessary to advise a family to move out of a certain neighborhood in order to separate the child from gang involvement. In general, treatment is more successful with the neurotic child than with the chronically aggressive child.

In concluding, I should like to say that there is a little of the delinquent in all of us; the difference is that the delinquent person acts out the misdeeds while we only think about it. Permit me to illustrate: a delinquent teen-ager was driving a car and was finally apprehended for speeding by a policeman, who expressed his attitudes in no uncertain terms. The boy immediately retaliated in some fashion and offered to fight him. This was "acting out". On the other hand, if we are caught by the policeman and subjected to a verbal barrage, most of us accept it with inner fortitude and martyred strength. But might I suggest that instead of suppressing our anger and frustration in such situation, we sublimate our emotional impulses in the same way the gentleman did when he was given a ticket for speeding? He asked, "By the way, officer, if I were to call you a darned fool, an idiot and a lot of vile names, (which he proceeded to enumerate) could you take me to jail?" The officer replied, "Of course, I could!" The answer came back: "Well, supposing I just thought about it, could you take me to jail?" The officer said, "No, of course not." Our man quickly answered: "Well, let's leave it at that then."

As a final word, may I express my appreciation for the privilege of addressing you today. It was indeed a great pleasure to be invited to your charming city to meet with you, and to see your great Medical School.

Thank You.

# GLAUCOMA, THE GENERAL PRACTITIONER, AND THE OPTOMETRIST

CLAY W. EVATT, M. D.  
Charleston, S. C.

**G**laucoma is the name applied to a symptom complex of progressive loss of visual field due to an increase in the intraocular tension, which may or may not be accompanied by pain.

The internal pressure of the normal eye is about 25 mm. of mercury, a higher pressure than is found in any other organ of the body. This pressure depends upon the volume of eye contents and on the elasticity of the coats. The aqueous humor is constantly being formed in the eye and constantly being eliminated from the eye. The rate of production and absorption of this aqueous humor is normally so nicely balanced that the intraocular pressure is relatively constant. Anything which upsets this balance will result in a change in the intraocular pressure. Aqueous humor is formed chiefly from the ciliary body and the fluid reaches the anterior chamber by passing between the posterior surface of the iris and the anterior surface of the lens through the pupillary space. From the anterior chamber it flows through the filtration angle into the canal of Schlemm. It leaves the canal of Schlemm by venous tributaries called aqueous veins.

When the intraocular pressure is constantly elevated, we have glaucoma. Though many factors are involved, the majority of patients with increased intraocular pressure, have interference with the outflow mechanism—there is a narrowing of the filtration angle.

For the purpose of clarity in discussion and study, glaucoma is divided into primary and secondary, acute and chronic, and still further into subtypes. We will devote our time here to chronic simple glaucoma of the closed or narrow angle and the open or wide angle type.

Eyes which have narrow filtration angles may develop acute glaucoma if the pupil is

dilated, which obstructs the already narrow angle. On occasion, people have been thrown into an acute attack of glaucoma by use of homatropine to dilate the pupils and paralyze the ciliary muscle while being tested for refraction. Fortunately, this type of acute closed angle glaucoma is not often seen.

There is a large group of patients with narrow or partially obstructed angles, in whom glaucoma develops gradually in the form of episodes or prodromal symptoms. The general practitioner is called to treat these patients because of headaches occurring at night or in the early morning hours. They complain of cloudiness of vision, colored haloes around the street lights at night, tenderness and a sense of pressure in the eyes, or too frequent changes of glasses. At first these attacks are evanescent, but if untreated, may develop into full fledged acute attacks with severe congestion and excruciating pain. These attacks are due to vasomotor instability. These patients are of the emotional type. The general practitioner recognizes the symptoms as those of glaucoma and refers them to a competent ophthalmologist, thereby saving many eyes from blindness.

There is another much more insidious type of glaucoma, the wide angle or open angle type, otherwise simple glaucoma. It is this type of glaucoma, which is largely responsible for 30,000 persons now totally blind in the United States. There are 800,000 in the United States who now have glaucoma and do not know it. These figures indicate the seriousness of the disease and call attention to the tragic fact that the majority of these patients might have been saved from blindness had their disease been recognized in its early stages.

In the wide angle type, in the beginning the patient has no symptoms. Fortunately, the general practitioner can take the intraocular pressure, thereby establishing a diagnosis. Since this disease usually occurs in people

---

Read before the meeting of the South Carolina Chapter of the Academy of General Practice—Clemson, S. C., Oct. 10, 1958.



over 40 years of age, much can be done if the general practitioner will bear in mind that every one over 40 should be suspected of glaucoma until proven otherwise. It is said that if all persons over 40 had their intraocular pressure taken once every three years the number of people blind from glaucoma would drop enormously. Unlike the previous type (narrow angle), this fellow has no prodromal episodes, no headaches, no pain, no symptoms till late in the disease, when the optic nerve is affected and the visual fields narrowed down. As the disease progresses, the pressure causes a cupping and pallor of the optic disk. The vessels are pushed to the nasal side above and below the cup. When the intraocular pressure rises to a level higher than the diastolic arterial pressure, the arteries show a collapsing pulse with each heart beat. The choroid around the disk may also atrophy. In the last stages the retinal arteries become smaller and by this time the eye is usually blind.

Visual field changes are characteristic in glaucoma and are of great aid in outlining and determining the best line of treatment.

In well established wide angle glaucoma, the increased pressure, characteristic field defects and disk changes make the diagnosis easy. In the early stages, however, some provocative tests may be useful to clinch the diagnosis. The water test is a simple, yet reliable one. Here the intraocular tension is taken early in the morning after abstaining from food or drink for eight hours. The suspect then drinks a quart of water and the pressure is recorded at 15 minute intervals. A rise of 10 mm. of mercury is considered positive. If there is still a possibility of glaucoma, the patient should be referred for special study and treatment.

Treatment of this type of glaucoma is preferably medical. Pilocarpine, eserine and acetazolamide (Diamox) are standbys. If the visual fields continue to lessen, surgery must be used. It is in these cases where the general practitioner can do most good and where the optometrist does the most harm. Since the preliminary program of this meeting went out, four physicians from different parts of the

state, communicated with me, urging that these facts be brought to your attention.

In the *Lions-International Magazine* for October 1958, page 4, under "Letters", is a letter captioned, "Optometrist Speaks". This letter comments on "How to Conduct a Glaucoma Clinic", referring to a club project in Winter Haven, Fla. The writer, an optometrist in Lincoln, Nebraska, states that from the report of this club project, "It would be easy for laymen to come to the conclusion that the ophthalmologists are the only persons who can recognize glaucoma." It is certainly true that ophthalmologists are the only people who can properly run a glaucoma clinic. The letter in a lay magazine by an optometrist is purely propaganda. However well meaning they may be, their training in glaucoma is little more, indeed if as much as that received by a nurse technician in an eye clinic. Most of the optometrists are conscientious good people and serve a useful function in society, when they confine their activities to their training, i. e. measuring vision and dispensing glasses.

*Medical Economics*,<sup>1</sup> states that, "Many ophthalmologists agree that routine eye refraction can be competently handled by the optometrists. But the medical men see a possible danger to public health in the growing tendency of some optometrists to imply that only they should do refractions—and that they can be counted on to detect pathological conditions of the eye." "These implications seem to have been made fairly explicit in a 1954 resolution adopted by the American Optometric Association. Said the A. O. A.: "The field of visual care is the field of optometry." And it recommended that "encroachments" into this "exclusive field" be prevented by law."

Some are not content with measuring vision and fitting glasses; they have gotten laws passed enabling them to fit and sell contact lenses. Not content with this, they have gotten laws passed enabling them to treat crossoyes with a mechanical device. Orthoptics has its rightful niche in muscle imbalances, but the child can put the bird in the cage every day until the bird lays an egg, and the child will still be crossoyed until his muscles are surgically corrected. Some optometrists in South

Carolina are not content with this, they are present at every session of Legislature, seeking to have their diagnoses, their opinions, and their testimony in court, given the same credence as that of the trained ophthalmologists. The general public does not know the difference between optometrists and ophthalmologists. They need to be told the difference, to be educated in this matter, and you are the men to do it. The little dabble of training they get in glaucoma and other eye diseases, is a glowing illustration of the aphorism that a little learning can be a dangerous thing.

Every day ophthalmologists have patients come to them just before total blindness who have over the years been given glasses repeatedly by optometrists. Those same patients might have been saved from blindness if they had been adequately treated. I am informed that the University of South Carolina, in the Extension Division, is helping the optometrists put on a seminar again this year. You should talk to your legislators.

You, the General Men, have the people's confidence more than anyone else. Your patients depend on you for guidance in all matters of health. You can do more than any other group to educate the laity in combatting this greatest cause of blindness—glaucoma.

Another point, which is of no small moment to you as General Men, using drugs for their antispasmodic effects in gastrointestinal and other systemic conditions (stomach ulcer, Parkinson's, etc.), is to bear in mind that these drugs generally have important mydriatic and cycloplegic effects on the eye and may precipitate glaucoma.

Dr. M. Choltz, *et al*,<sup>2</sup> report no such ill effects when using dicyclomine hydrochloride (Bentyl) in 53 patients with normal eyes and 17 with glaucoma. The article reports a very valuable adjunct to our armamentarium. The drug is supplied by the Wm. S. Merrell Co.

To take the tension, have the patient lie down or lean his head far back. Put two drops of Ophthaine (Squibb), or some other analgesic, in each eye. I prefer Ophthaine because at once the cornea is sufficiently anesthetized for taking the tension. A second virtue is that the effect of Ophthaine passes off almost immediately. Any standard instrument is all right. The Schiøetz is comparatively inexpensive and trouble-free.

#### REFERENCES

1. 35: 135 (Oct. 27, 1958)
2. J.A.M.A. 166:1276 (Mar. 15, 1958)



# SHOULDER-HAND SYNDROME

## TREATMENT WITH STELLATE GANGLION BLOCK

W. HAMELBERG, M. D., AND J. JACOBY, M. D.

Pain is probably the most difficult problem that the practitioner of medicine has to handle. The problem is compounded when the cause of the pain is obscure or may have occurred several weeks or months before. Such is the case with shoulder-hand syndrome.

Shoulder-hand syndrome is characterized principally by pain, swelling, trophic skin changes, and limitation of motion in all joints of the upper extremities, except the elbow. The syndrome is considered to be a result of dysfunction of the sympathetic nervous system and comes under the general classification of reflex sympathetic dystrophy. There have been many other terms used to describe this syndrome, such as causalgia, sympathetic vasomotor disturbance, malingering, and visceral motor phenomenon of the hand. Phantom limb also is considered to be a reflex sympathetic dystrophy.

The syndrome, reflex sympathetic dystrophy, discussed fully by Leriche in his book,<sup>1</sup> was probably first described in the Civil War. Weir Mitchell<sup>2</sup> at this time described the typical picture of causalgia occurring in the injured soldiers. Since then, the syndrome has been closely correlated with myocardial ischemia, disease of the chest, and lesions of spinal cord and ganglion.<sup>3, 4</sup>

In an effort to classify the various etiological factors involved in reflex sympathetic dystrophy, Steinbrocker<sup>5</sup> advised the classification seen in the next column.

### *The Clinical Picture*

The clinical picture of shoulder-hand syndrome is one in which the patient presents himself with a history of pain in the upper extremity which is of such a degree as to limit use of the extremity. The physician may be able to directly correlate a history of trauma or suppuration with the onset of symptoms; however, this correlation in some cases may

Dr. Hamelberg is Professor and Chairman, Department of Anesthesiology, Medical College of South Carolina.

Dr. Jacoby is Professor and Director, Department of Anesthesia, Ohio State University.

A. Idiopathic.

B. Peripheral lesions:

1. Trauma and suppuration of the extremity.
2. Vascular disease.
3. Intraforaminal osteoarthritis of the cervical spine.
4. Cardiac disease.
5. Other thoracic diseases.
6. Nodular panniculitis.

C. Lesions of the cord and ganglion:

1. Herpes zoster.
2. Diffuse vasculitis.

D. Higher lesions:

1. Cerebral lesions.

not be obvious. In all probability, the original trauma is well-healed and is of no concern to the patient. In those cases in which the etiological factor may be systemic disease, it may be exceedingly difficult to show the correlation. The pain is typically described as dull, aching and burning in nature, and is particularly bothersome at night, interfering with sleep. In severe cases of shoulder-hand syndrome, merely stroking the extremity produces severe, unbearable pain. Often the weight of bed sheets cannot be tolerated.

On physical examination, early in the disease, there is a reddish glassy appearance to the skin, the fingers and hand are swollen and stiff; and there is pain on motion of the fingers as well as the shoulder. The hand at first may be dry and warm, only later to become cold, dusky, and clammy. As the disease progresses, there may be a short period of remission, but this is shortly followed by an exacerbation, and the disease progresses until it makes the extremity useless.

### *An Explanation of the Clinical Picture*

In carefully analyzing the syndrome there is not a satisfactory answer to the clinical picture. The presently accepted explanation is related to a malfunction of the internuncial neurons of the spinal cord.<sup>6, 7</sup> It is stated as follows:

"Prolonged bombardment of pain impulses



sets up a vicious circle of reflexes spreading up, down, and across the cord. Because of summation and facilitation of the nervous system, this activity is kept going. This bombardment affects the sympathetic cells in the lateral horn of the spinal cord, which produces vasomotor disturbances in the extremity with resultant edema and swelling. Involvement of the anterior horn cells and the thalamus produces the spasm of the muscles and pain."

The warm, dry, swollen hand and fingers are explained on the basis of capillary hypertension.<sup>8, 9</sup> Normally, it is expected with a warm, dry hand to have a decrease in peripheral resistance and a low pulse pressure; however, there is actually just the reverse—an increase in peripheral resistance and an increase in pulse pressure occurs. This discrepancy is apparently abolished with sympathetic blockage.

The head, neck, upper extremity and chest are closely related in their sympathetic nerve supply. The head, neck and upper extremity receive their sympathetic innervation from the first thoracic and inferior cervical ganglion which are often combined to form the stellate ganglion. The chest receives its sympathetic supply from the ganglion of the upper thoracic region, and this close relationship probably accounts for the occurrence of shoulder-hand syndrome in patients with cardiac and pulmonary disease.

Undoubtedly, there are psychic factors which also enter into the explanation of the clinical picture. This is particularly true in those cases in which industrial compensation and insurance benefits are involved. In times of war, the subconscious desire to avoid further exposure to battle may be a factor in exaggerating the severity of the disease.

In those patients with phantom limb syndrome, there has been a failure of the cerebral cortex to adjust to the new body shape so that the scar tissue and neuroma that form following amputation are interpreted by the patient as producing pain in the removed limb.

#### *Treatment*

The value of interrupting the sympathetic activity to the involved area of the body has been well proven<sup>2, 6-11</sup> to be the treatment of choice in patients with reflex sympathetic

dystrophy. This interruption may be accomplished either chemically by use of local anesthetic drugs or surgically. Certainly to confirm the diagnosis of reflex sympathetic dystrophy, the sympathetic nervous system should be blocked, using a local anesthetic agent. Before surgery is finally decided upon, the patient should be given the benefit of repeated blocks. Quite often, repeated blocks of the sympathetic nervous system in this disease will result in a cure.

As an adjunct to blocking the sympathetic nervous system, the patient should also receive adequate physical therapy and analgesics, as indicated. It is particularly important the physical therapy follow the block immediately since the patient is then free of pain.

#### *Analysis of Results*

The series to be reported includes 115 cases, on which 285 stellate blocks were performed. Following the classification of Steinbroeker, the total number of cases along with the total number of blocks in each category is shown in Table I.

Table I  
Analysis of Results

	<i>Patients</i>	<i>Blocks</i>
Steinbroeker Classification:		
A. Idiopathic	39	89
B. Peripheral lesions:		
1. Trauma and suppuration	40	128
2. Vascular disease	6	8
3. Intraforaminal osteoarthritis of cervical spine		
4. Cardiac disease	11	25
5. Other thoracic diseases	15	31
6. Nodular panniculitis		
C. Lesions of cord and ganglion:		
1. Herpes zoster	1	1
2. Diffuse vasculitis		
3. Cord injury	3	3
D. Higher lesions:		
1. Cerebral lesions		
TOTAL	115	285

Table II divides the results of the blocks into four groups. Although good to fair results were obtained in a large majority of patients, in actual practice, however, the most permanent results were obtained in those patients suffering from shoulder-hand syndrome as a result of trauma and suppuration. The patients listed in the other groups, however, obtained satisfactory relief and were very appreciative. However, because of their basic chronic disease, their symptoms usually returned after a varying length of time.

Table II

	Good	Fair	Question- able	No Relief	Total
Idiopathic	25	5	7	2	39
Trauma & suppuration	35	2		3	40
Vascular disease	5			1	6
Cardiac disease	10	1			11
Other thoracic disease	9	5	1		15
Herpes zoster	1				1
Cord injury	3				3

### Complications

The complications following stellate ganglion block are related to either the drug or the technique of the block. Those complications resulting from the drug are those expected with the use of local anesthetic agents; namely drug sensitivity, overdose of drug, and intravascular injection. Drug sensitivity is rare, and overdose of drug should not occur since the amount needed is minimal in relation to toxic dose. However, intravascular injection is very likely to occur since the point of the needle can pierce the vertebral artery or with a malpositioned needle the point may lie within either the jugular or common carotid vessels. Great precaution, therefore, should be exercised.

Since the technique of the block requires that the point of the needle be in close proximity to the subarachnoid space and pleura, constant attention to detail is necessary. By aspirating before injection, it is often possible to determine if the needle has entered the subarachnoid space. However, occasionally the

point of the needle lies within the subarachnoid space, and no fluid can be aspirated. Should the needle be in the subarachnoid space and the anesthetic solution injected, a total spinal will result. To avoid pneumothorax, the authors use a syringe attached to the needle at all times. This prevents air from entering through the needle from the outside but does not prevent the cutting action of the needle in the lung, which is probably responsible for most pneumothoraces.

To treat the above complications should they occur, the following equipment should be present:

1. A means of giving oxygen under pressure.
2. Intravenous setup with the various stimulants and sedatives.
3. Endotracheal equipment.
4. Suction.

In addition to these, the patient should be without food or drink several hours before the block and should be premedicated with a short-acting barbiturate.

### Summary

1. The clinical picture of shoulder-hand syndrome is presented with a classification of the etiological factors along with a possible explanation of the syndrome.

2. Results of treatment of shoulder-hand syndrome with stellate ganglion block in 115 patients are presented.

### REFERENCES

1. Leriche, R.: *The Surgery of Pain*. London, Baillière, Tindall & Cox, 1939.
2. Mitchell, S. W.: *Injuries of the Nerves and Their Consequences*. Philadelphia, J. B. Lippincott & Company, 1872.
3. Boas, E. P. and Levy, H.: Extracardiac determinants of the site and radiation of pain and angina pectoris with special reference to shoulder pain. *Am. Heart J.* 14:540, 1937.
4. Askey, J. M.: The syndrome of painful disability of the shoulder and hand complicating coronary occlusion. *Am. Heart J.* 22:1, 1941.
5. Steinbrocker, O., Spitzer, N. and Friedman, H. H.: The shoulder-hand syndrome in reflex dystrophy of the upper extremity. *Ann. Int. Med.* 29:22, 1948.
6. Lorente de No, R.: Analysis of the activity of the chains of internuncial neurons. *J. Neurophysiol.* 1:207, 1938.
7. Evans, J. A.: Sympathectomy for reflex sympathetic dystrophy. *J.A.M.A.* 132:620, 1946.
8. de Takats, G.: Causalgic states in peace and war. *J.A.M.A.* 128:699, 1945.
9. de Takats, G. and Miller, D. S.: Post-traumatic dystrophy of the extremities. *Arch. Surg.* 46:469, 1943.
10. Steinbrocker, O., Spitzer, N. and Friedman, H. H.: The treatment of the shoulder-hand syndrome. *Anesth. & Analg.* 27:273, 1948.
11. Steinbrocker, O., Neustadt, D. and Lapin, L.: Shoulder-hand syndrome: sympathetic block compared with corticotropin and cortisone therapy. *J.A.M.A.* 153:788, 1953.

# ANESTHESIA FOR THE TRAUMATIC SURGICAL PATIENT

C. R. STEPHEN, M. D.\*  
Durham, N. C.

**T**raumatic accidents are becoming so commonplace that every physician must possess knowledge concerning definitive therapy of injuries. In many instances he may be called upon to prepare the patient for operation or to recommend and administer some type of anesthesia to facilitate surgery. The emergency nature of such procedures sometimes creates hazardous problems.

## *Preparation*

Perhaps the greatest error which is made with the injured patient is to rush him headlong and precipitately to the operating room. While cursory examination may show the need for definitive surgery, the urge for speed and immediate action should not supercede the more rational approach of calm, complete but rapid appraisal. With few exceptions greater benefits accrue to the patient by preparing him adequately for surgery.

When the patient is seen first in the emergency room, attention is directed primarily to the possible need for resuscitation, for support to the flagging vital functions of respiration and circulation. In any serious injury the patient will benefit from the administration of oxygen. Every emergency room should be equipped with a means to administer oxygen under positive pressure. All that one needs is a tank of oxygen, a reducing valve and a reservoir bag attached to a face mask. By squeezing the bag intermittently, the respiration of the patient can be supported with oxygen.

If spontaneous respirations stop, artificial respiration of some type must be instituted within three minutes or permanent cerebral damage will result. Adequate artificial respiration cannot be maintained with any of the external methods of application, i. e., pressure on chest, Schafer method, Silvester method,

and so on. Satisfactory exchange of oxygen and carbon dioxide is possible by applying positive pressure intermittently through the mouth and hence into the lungs. In the absence of a means of giving positive pressure oxygen, mouth to mouth respiration is satisfactory, or a simple instrument such as the Kreiselman hand bellows resuscitator\* is of value. Before beginning such artificial respiration, one must ensure that the upper air passages of the patient are not obstructed. If the injury involves the head and neck with encroachment on the airway, tracheostomy under local anesthesia should be performed before movement of the patient. If the thoracic cage is involved, tracheostomy will reduce the dead space, permit easier aspiration of the tracheobronchial tree, and allow respiratory exchange with minimal effort. If in doubt regarding the patency of the upper airway, a tracheostomy is probably indicated.

Circulatory insufficiency is usually manifested by the syndrome of shock. Therapy directed towards increasing the circulating blood volume should be instituted hand in hand with respiratory resuscitation and before definitive surgery is attempted. If cannulation of veins is difficult, a cutdown should not be delayed. In the injured patient hemorrhage is the most frequent cause of shock. The hemorrhage may be external or obvious, or may be internal, involving the thoracic or abdominal cavities or confined to the tissues of an extremity. In hemorrhagic shock whole blood is the best therapy. If not available, blood substitutes such as dextran or gelatin may be administered until such time as whole blood becomes available. Crystalline solutions such as saline or dextrose in water are of little value in restoring the blood volume of the patient. The employment of dilute vasopressor solutions, such as levarteronol or neosynephrine,

\*Division of Anesthesia, Duke University Medical Center, Durham, N. C.

\*Ohio Chemical Co., Madison, Wisconsin



should be employed in hemorrhagic shock only in acute emergencies and as a stop-gap measure to maintain arterial tension until such time as blood or blood substitutes are available. Their administration to raise the blood pressure is not remedial and may serve to give one a false sense of security. In very occasional instances, when the shock is purely neurogenic in origin, due perhaps to severe pain, infusion of vasopressor drugs may be indicated.

The question always arises as to when shock has been treated adequately to permit surgery. This decision will vary in individual patients, but in an arbitrary manner one can say that a degree of safety is present when the pulse rate is reduced to 100 per minute or less and the blood pressure is 90 mm. systolic or more. Of importance is the establishment of a favorable trend in these two indices.

While resuscitation is in progress, attempts should be made to determine the extent and number of injuries sustained. Although a compound fracture of the femur is obvious, it is important to rule out more obscure injuries such as involvement of the spinal cord or intra-abdominal lesions. A complete but rapid physical examination should be supplemented by utilization of x-ray facilities. The delay involved in such procedures may be life-saving to the patient.

Any details of history that can be obtained from the patient, relatives or witnesses of the accident are of importance in therapy. For example, it is of value to know if the patient is normally hypertensive or is a severe diabetic. Information regarding the circumstances surrounding the injury is often an aid in diagnosis. Of special importance, particularly if general anesthesia is contemplated, is knowledge concerning the recent ingestion of food or liquid by the patient. Regurgitation and aspiration of stomach contents during or after operation is frequently a fatal complication. This complication can be prevented if appropriate prophylactic action is taken. If the patient has eaten within two hours prior to the injury, or since the injury, he should be treated as if he has a full stomach. Under such circumstances the stomach may be emptied by utilization of a large stomach tube. If the ex-

tent of injury prevents this method of attack, one should consider performing the surgery under local or regional anesthesia. If such an approach is not feasible, the airway of the patient should be rendered immune to aspiration by the insertion of an intratracheal tube under topical analgesia prior to the induction of general anesthesia. The employment of thiopental-sodium (Pentothal) and a muscle relaxant to insert the endotracheal tube is dangerous. One or both of these drugs may cause relaxation of the cardiac sphincter and the silent regurgitation of large amounts of gastric contents. The result has been fatal in the past.

#### *Administration of Anesthesia*

The patient who is in shock, or who has just been resuscitated, requires much less anesthetic drug of any type than the normal patient. It has been said that the shocked patient is already half-anesthetized. Premedication prior to surgery should be minimal, or none at all. The administration of an anticholinergic drug such as atropine may be helpful prior to general anesthesia providing the pulse rate is not too rapid. Whatever premedication is ordered should be given slowly intravenously. Due to the sluggish circulation, subcutaneous or intramuscular administration may result in delayed and inadequate absorption. Prior to beginning major surgery it is wise to have two veins cannulated with large needles for the administration of blood and fluids. A cut-down should be done if necessary. Regardless of the technique of anesthesia employed, oxygen should be administered to the patient during the operation. Moreover, even though their use is not contemplated, means for performing endotracheal intubation and aspiration of the tracheobronchial tree should be readily at hand.

As a general preference, the accidentally injured patient should have pain relief provided by local or regional analgesia. When properly applied, these techniques have proven to be the safest. Xylocaine is the preferred drug to utilize with these techniques. The total dose in the adult should not exceed 500 mg. For injuries of the upper extremity the brachial plexus nerve block or a combination of median, ulnar and radial nerve blocks are not difficult to master. For lesions of the

trunk intercostal nerve blocks are easy to perform and give good pain relief. Abdominal field block may prove very useful as a substitute for or supplement to intercostal block. In the lower extremity a sciatic-femoral nerve block is useful and does not disturb circulatory dynamics. With any local or regional procedure analgesia is enhanced by allowing the patient to breathe a mixture of 50 per cent nitrous oxide and 50 per cent oxygen. Usually this mixture does not produce unconsciousness.

Spinal analgesia should be used cautiously if at all for the patient in potential shock. Paralysis of the sympathetic nervous system will occur over the area of analgesia and may so alter the existing circulatory compensation (peripheral vasoconstriction) that profound and dangerous decompensation and hypotension may result. If the patient is in severe pain and it is believed that the shock-like syndrome is neurogenic secondary to the pain, spinal analgesia producing relief of the pain may be indicated. However, this latter state of affairs occurs rarely.

If general anesthesia is unavoidable, the drug or combination of drugs and technique with which the administrator is most familiar should be chosen. In most patients only low concentrations of drugs will be required. Inhalation compounds are preferable because of the relative ease with which too deep a plane of anesthesia can be reversed. A technique should be employed which will permit adequate oxygenation of the patient at all times. Better control of the airway and hence of oxygenation is always possible with an intratracheal tube in place.

Cyclopropane fulfills most of the requisites for a safe inhalation general anesthetic. Light

ethyl ether anesthesia is safe and preferable when it is the drug most familiar to the administrator. Muscle relaxant drugs may be indicated to produce muscular relaxation, but they should be used only when the anesthetist is prepared and able to assist or control the respiratory exchange of the patient. The ultra-short-acting barbiturates such as thiopental should be employed with great discretion and only in small amounts. They can precipitate cardiovascular collapse easily and quickly when shock or potential shock is present.

During anesthesia and surgery ancillary therapy to avoid shock should be maintained. Blood loss is best measured by weighing sponges so replacement can be accurate. Vaso-pressor drugs should be administered only to tide over an emergency. Although intravenous cortisone compounds probably are not harmful when administered over short periods of time, there is no indication at present that they exert any beneficial effect in the injured patient undergoing surgery.

#### *Summary*

The acutely injured patient should undergo a phase of preparation prior to institution of anesthesia and surgery. Attempts are made to resuscitate the respiratory and cardiovascular systems so as to improve respiratory exchange and correct shock. The full extent of injuries is determined before remedial surgery is begun. A positive effort is made to find out whether the patient has eaten recently. If possible pain relief is obtained by employing local or regional analgesia. If general anesthesia is necessary, inhalation drugs with which the anesthetist is familiar are preferable, utilizing concentrations lower than those employed normally.



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Effects of Emotion on the ECG

DALE GROOM, M. D.  
Department of Medicine

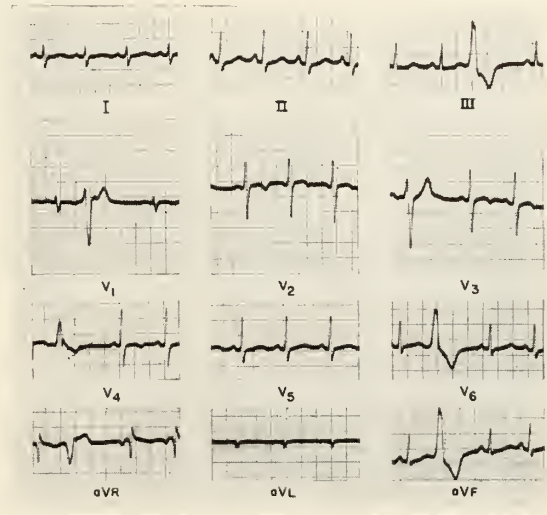
**Case Record**—A feeling of "inability to get a deep breath" was the chief complaint of a 43 year old housewife. This symptom was associated with transient sensations of numbness of the hands and feet, palpitation, and obvious anxiety. With the onset of the menopause, these and other functional symptoms which had troubled her for years were intensified and she had become unduly irritable, emotionally unstable, and depressed.

Evaluation of her cardiac status revealed no abnormalities other than those illustrated in her electrocardiogram. Laboratory investigations of her thyroid and carbohydrate metabolism and of her renal function were negative. The patient had a moderate elevation of systolic blood pressure which readily declined to normal levels with rest. She was treated with mild sedation and psychiatric care.

**Electrocardiogram**—The basic rhythm is a regular sinus one at a rate of 106 per minute. Numerous premature beats which appear to arise from a single ventricular focus are evident in the wide and variously slurred or notched QRS complexes recorded in several of the leads. The P-R interval is normal (0.16 sec.) as are the normally conducted QRS complexes which reveal a vertical electrical axis, depolarization being directed toward the left leg where the deflections are upright, and away from the left arm where they are negative. The T waves (aside from those of the ectopic beats which are characteristically prominent and of opposite polarity to the QRS) are diphasic or inverted in the precordial leads as far to the left as  $V_1$ . In lead II the Q-T interval is well demarcated and measures 0.36 sec. This is in excess of the normal range for a heart rate of 106 in women, for which 0.32 sec. is an average value.

**Discussion**—Four features of this electrocardiogram are particularly relevant: the sinus tachycardia (rate more than 100), the ectopic arrhythmia, T wave abnormalities, and prolongation of the Q-T interval. Whether they are all due to the patient's emotional disorder is perhaps open to question, but each of them is often seen in association with anxiety states. Their combination here might be considered as even stronger evidence of that diagnosis.

Sinus tachycardia is of course common in anxious individuals. Likewise, isolated ectopic beats, supra-



ventricular or ventricular, occur perhaps almost universally at some time in normal hearts, and their association with nervous tension is well known to clinicians. Probably both contribute to "palpitation"; hence, they themselves are conducive to precordial consciousness and further anxiety, as they were in this case.

Less understood are the pronounced changes in T waves which can result from emotional stress. In the precordial leads particularly, flattened, diphasic or actually inverted T waves may occur in susceptible patients as a physiologic alteration of repolarization. Generally such T waves are not sharply or deeply inverted, the abnormalities are often transitory, and the fact that they are unaccompanied by any QRS changes indicative of infarction provides a further clue as to their benign nature. Actually they are non-specific; reporting them as such and following them up with a repeat tracing for clarification if necessary may avoid mistaken diagnoses of coronary disease or "myocardial damage." Sympathetic over-stimulation has been suggested by some as the cause of the repolarization change, though the mechanism is still obscure.

The hyperventilation syndrome is a clinical diagnosis and a classical sign of anxiety. Sustained overbreathing produces a pulmonary alkalosis, a reduction in the ionized fraction of the blood calcium, and resultant increase in neuromuscular irritability. Signs of hypocalcemia such as tetany may result though the total blood calcium level remains normal. In the electrocardiogram a deficiency of calcium ion is thought to prolong the Q-T interval by lengthening the S-T segment. The possible role of the alkalosis in-



self, or of concomitant disturbances of autonomic innervation or humoral influences in causing these electrical changes is still uncertain.

Functional abnormalities have received remarkably little investigation, and no aspect of electrocardiography is more controversial. Too often they have been misconstrued as evidence of organic heart dis-

ease because they have been viewed as isolated findings, apart from the overall clinical picture. Until more is learned of the nature and mechanisms involved they should be interpreted with caution and awareness that "over-reading" a tracing, especially in regard to configuration of T waves, may engender iatrogenic heart disease.

---

*Imperforate Anus.* Report of 130 Cases. R. Randolph Bradham (Charleston) *Surgery* 44:578, Sept. 1958.

Imperforate Anus includes various obstructive malformations of the terminal bowel. The embryological basis for these developmental anomalies is described and a useful clinical classification is given. Eighty-three patients (64%) in this series had an associated fistula and sixty-two (48%) had at least one other congenital anomaly. The symptoms and physical findings are discussed. Special emphasis is placed on diagnosis by roentgenography. A definite operative plan must be based on knowledge of the distance of the blind end of the rectum from the anal skin, associated anomalies, and presence of fistulas. The perineal approach should be used in cases where the blind end of the rectum is within 1.5 cm. of the anal skin and the abdomino-perineal approach for those above that level. There are specific indications for transverse colostomy. Results of treatment are presented.

---

*Congenital Hypoplasia of the Gall Bladder.* Stanley C. Baker (Greenwood) *Am. Surgeon* 24:537-538, July 1958.

1. Congenital absence or hypoplasia of the gallbladder is a rare anomaly. There have been only 76 cases reported up to 1954.

2. Approximately one-half of the reported cases were found as incidental autopsy findings. The remaining clinical patients presented with symptoms referable to the gall bladder or extrahepatic biliary ducts.

3. The most common presenting complaint in the clinical reports was obstructive jaundice due to choledocholithiasis.

4. Two cases were presented: one was found as an incidental autopsy finding; the other was of a patient who presented with symptoms of chronic cholecystitis. X-rays showed nonvisualization of the gall bladder. A laparotomy was performed and a hypoplastic gall bladder removed. The common duct was dilated but contained no stones. A one-year follow-up revealed recurrent episodes of her preoperative symptom complex.

---

*The Use of Gastrointestinal Mucous Membrane As A Replacement for Skin—An Experimental Study.* Carter Maguire, M. D., (Charleston), Nicholas Georgiade, M. D., Joseph McWhirt, M. D. and Kenneth Pickrell, M. D. *Plast. & Reconstruct. Surg.* 22:139 Aug. 1958.

This paper describes the technique and results of an experimental procedure which was studied with the hope of finding a suitable substitute for skin. It was postulated that when the highly specialized mucous membrane of the gastrointestinal tract was transplanted to an external environment and used as a substitute for skin, that total metaplasia might transform the glandular epithelium into a stratified squamous epithelium with eventual cornification.

The studies were carried out in the Plastic Surgical experimental laboratories at the Duke Medical Center. Mongrel dogs and one human volunteer were used. A technique for removal of the gastrointestinal mucous membrane as a sheet was developed and is described. Results revealed that although the mucous membrane of the gastrointestinal tract could be transplanted and made to grow on the body surface, it remained a slick, secreting surface which was unacceptable as a substitute for skin. There was no significant metaplasia. Post-grafting contracture of the mucous membrane grafts was marked as would be expected.

---

*The Effects of Smoking on the Respiratory System in Normal Individuals.* Kelly T. McKee, M. D., Charleston, South. M. J. 51:1110 Sept. 1958.

A brief review of some of the observations on the local effects of the inhalation of tobacco smoke upon the respiratory system of normal individuals has been presented, along with a report of observations on the effects of tobacco smoking upon ventilation in a large group of normal individuals. While it appears unquestioned that smoking produces irritation of the larynx and adjacent areas, these studies do not demonstrate that ventilation is impaired in young healthy smokers.





## PRESIDENT'S PAGE

A physician may not reveal the confidences entrusted to him in the course of medical attendance or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

Confidential acts or problems of the patient entrusted to his physician during the course of his illness should never be revealed to anyone. Exceptions to this rule should be treated with delicacy and patience. These confidential acts and problems may have to be revealed on occasion, as required by the laws of the state or when it is necessary to protect a healthy person against a communicable disease.

To minimize or exaggerate the condition of a patient is a grave error on the part of his physician. The patient, his family or his responsible friends should always be given a true picture of his condition as observed by his doctor.

Records of the patient's present or former illnesses in the possession of his doctor should be promptly transmitted to any succeeding physician on the case when requested to do so by the patient. This may be done by telephone, in writing, or by personal inspection of his patient's records in the possession of his former physician. Prompt and courteous transmission of these records may be necessary to effect a cure of the disease at hand.

These records are notes of the impressions obtained from the patient by his physician and are by no means the property of the patient. They are medical, technical, personal and often informal, and consequently quite meaningless to the patient. They may be misinterpreted by a layman and should only be transmitted to the patient's attending physician who can then explain them to the patient or members of his family.

This is one of the most important sections in the code of ethics. It should be strictly observed by all members of the medical profession.

R. L. Crawford  
President

# Editorials

---

## MOUTHINGS MAKE MALPRACTICE

"No wonder the patient is in this condition. Your Doctor didn't treat him properly. You should have brought him to me sooner!"

On such statements are mal-practice suits founded.

Frequently such a statement is made to build an alibi in case the new treatment is not successful, but there is no excuse for one doctor to make such an assertion unless he was present at the time the previous doctor made the decisions as to the course of treatment and was familiar with all the circumstances surrounding the case.

Doctors are called upon to make decisions on surgical and medical procedure every day. There doesn't breathe a doctor who has not, on occasion, made the wrong decision. In so doing, he exposed himself to possible law-suit. Particularly is this so if some Monday-morning-quarterbacking doctor comments that he would have proceeded differently, and that the first man was wrong. But, the first doctor acted in what he thought was the best interest of the patient, with the decision resting on conditions and facts as known *at the time*.

It is our duty to render the best medical attention of which we are capable, but it ill behooves us to attempt to promote our own importance with criticism of another doctor's actions when we were not there at the time.

"The Principles of Medical Ethics" of the American Medical Association states in Chapter VI, Sec. 4:—

"When a physician does succeed another physician in charge of a case, he should not disparage, by comment or insinuation, the one who preceded him. Such comment or insinuation tends to lower the confidence of the patient in the medical profession and so reacts against the patient, the profession and the critic."

Frank C. Owens, M. D.

## BLEEDING AND CLOTTING TIMES

A skeptical eye has been cast upon the use

of routine determination of bleeding and clotting times preliminary to surgery, especially to tonsillectomy. There have been efforts in many places to eliminate what appears to be an entirely unsatisfactory procedure from the routine of pre-operative examination, but there are enough of the older school of "die-hards" who feel that the test is of value and should be done as a protection against the possible appearance of a true bleeder. A paper<sup>o</sup> which appeared recently seems to add weight to the evidence against the value of these tests. The author feels that as these tests are done under ordinary conditions they are inaccurate and misleading, and may give false positives which are apt to create difficulties. He believes that a proper history and physical examination will yield as much and more reliable evidence of bleeding tendencies as will the tests. Except in unusual instances in which surgery is performed at a very early age, there will have been undoubtedly an opportunity for a clinical demonstration of a child's tendency to bleed excessively. It appears that the limitations of the tests are sufficient to warrant the abandonment of procedures which are of no value and which create unnecessary expense to the patient and no assurance to the surgeon.

<sup>o</sup>New England J. Med. 259:1025

## YESTERDAY'S RECOVERIES AND TODAY'S CURES

In the flood of literature which always heralds the availability of a new antibacterial product, there is usually a flotsam of statistics which purport to show the remarkable value of whichever product is under promotion. They are usually well organized and speak well for themselves; sometimes they carry no more definite information than that indicated by the number of patients with a given disease, the number of "successes" and "failures". Often the degree of success or the reason for classifying an outcome as successful is not specified. It is to be gathered that success means that the disorder considered cleared up



satisfactorily and fairly promptly, and that "failure" means that there was no obvious good effect from the administration of the drug. Perhaps "success" is a less boastful word than is "cure". Before the day of the current life-savers, there were many "successes" without benefit of antibiotics. There was sometimes a rather remarkable series of successes which were due primarily to the normal processes of resistance and cure by the body, without benefit of drugs whose value could be established.

Plucked from the swirl of advertising papers which cross the desk is one which gives figures on certain conditions ordinarily not too serious, such as otitis media, purulent rhinitis, tonsillitis, bronchitis, cervical adenitis, and gastroenteritis, in which "success" was achieved rather consistently with a new drug. Without deprecating the value of the drug, one might be entitled to wonder how much of the basic success was natural, and how much above this baseline was attributable to the drug. Perhaps it behooves us to be not too puffed up, and to give due credit to that still vital healing power of nature.

---

## NEWS

---

### DR. JOSEPH P. CAIN, JR., NEW TRUSTEE OF MEDICAL COLLEGE OF SOUTH CAROLINA

Dr. Joseph P. Cain, Jr. of Mullins has been appointed to the Board of Trustees of the Medical College of South Carolina at Charleston. The appointment was made by Governor George Bell Timmerman, and Dr. Cain will succeed the late Dr. Frank L. Martin.

A native of Greenville, Dr. Cain received the B. S. degree from the University of South Carolina in 1931, and his M. D. in 1935 from the Medical College of South Carolina. His internship was at St. Francis Infirmary, Charleston, and Lynn Hospital, Lynn, Mass. His post graduate work has been done at George Washington University and the Medical College of South Carolina.

Before coming to Mullins in 1937 to practice medicine and surgery he was at the Mission Hospital in Asheville, N. C. He is a former Chief of Staff of the Mullins Hospital and continues a member of the staff. He is on the consultation staff of the Marion Memorial Hospital, Marion and St. Eugene Hospital, Dillon.

Dr. Cain holds membership in the Marion County Medical Society and has served as its president; the Pee Dee Medical Association, having served as presi-

dent and current editor of its bulletin; the South Carolina Medical Association where he has served as chairman of Council and is currently on the editorial staff of the Journal; the American Medical Association, serving as a member of the committee on industrial health; and the Medical College alumni association, having served as secretary-treasurer, and Post Graduate Education Committee. His specialty groups include the Southern Surgical Congress and the American Board of Abdominal Surgery.

Dr. Cain is a director of the S. C. Medical Care Plan (Blue Shield) and is a surgical consultant for the S. C. Division of Vocational Rehabilitation.

During World War II, Dr. Cain received a Congressional Citation for work as examining physician with the Marion County Local Board No. 1.

A member of Christ Episcopal Church, he has been an outstanding leader in his denomination.

He has also been a leader in Boy Scout work, and has served as chairman of the Mullins district, Advancement chairman of the Pee Dee area, and at present is vice-chairman of the Mullins—Marion district.

For six years he served as a member of the Mullins City Council, and at present is the chairman of the Board of Health.

---

Dr. R. Blackwell, M. D. has announced the opening of his new office for the general practice of medicine and surgery on East Marion street in Kershaw.

"Open House" was held at the Clinic Sunday, December 21, from 2 to 5 p. m. The public was invited to attend.

Dr. Blackwell was graduated from the University of South Carolina with a BS degree. He received his Doctor of Medicine degree from the Medical College of South Carolina and was licensed by the State Board of Medical Examiners. He completed his internship at the Charlotte Memorial Hospital in Charlotte, December 19.

---

### DR. W. S. SMITH'S OFFICE DEDICATED

In Walterboro at appropriate services Sunday afternoon, the new offices of Warren S. Smith, M. D. were dedicated to God and the art of healing. The Rev. Lewis R. Sherard and the Rev. W. Fred Hedgepath were in charge of the dedicatory service.

Dr. Smith presented the building by saying "I present unto you this building, to be consecrated to the service of the Almighty God in the relief of sick and the suffering. A prayer of consecration and the benediction completed the service.

All of the dedication service was held on the front steps and following this an open house was held until 5 p. m.

Dr. Smith practices general surgery, and has specialized in this field.

---

### NUTRITION CONFERENCE

A Nutrition Conference is scheduled for March 17,

Wade Hampton Hotel, Columbia. This Conference bids to be one of the most outstanding sponsored by the State Nutrition Committee and brings into South Carolina as speakers:

Dr. Charles Glen King, Director, Nutrition Foundation, New York City

Dr. Neige Todhunter, Dean, Home Economics, University of Alabama

Dr. R. R. Williams (discoverer of Vitamin B<sub>1</sub>), Summit, New Jersey

Dr. James Hundley, Nutritionist, National Institute of Health

The meeting will begin in the morning of March 17 with a business session of the State Nutrition Committee from 10:30 to 12:30. The afternoon session will be devoted to such topics as "Nutrition Up-to-Date" and "Nutrition Programs in Action" by the above listed speakers. At the 7 p. m. Banquet, Dr. R. R. Williams will be honored for his contribution to the scientific world in making available for human welfare Thiamine or Vitamin B<sub>1</sub> and for his support and work in the Enriched Cereals Program in South Carolina.

---

#### MEDICAL BOARD NAMES DOCTORS PASSING EXAMS

The South Carolina Board of Medical Examiners announced Wednesday that seven persons passed exams given by the board in December.

They are:

Drs. George F. Cox, Jr. of Pamplico; Thomas G. Durham of Landrum; Marion Edmonds of Orangeburg; Ronald J. Elliott of Columbia; Gloria N. B. Green of Columbia; Archibald F. Harrison, III of Columbia; and James C. Thrower of Reevesville.

The board also announced it had licensed 13 applicants by endorsement.

They are:

Drs. James F. Adams, Jr. of Columbia; David S. Asbill, Jr. of Columbia; Wade R. Bedingfield, Jr. of North Augusta; Walter H. Byerly of Hartsville; Claude C. Cowan, Jr. of Greenville.

Also, Robert B. Crichton of Columbia; Edward H. Gazlier of Columbia; Alva A. Knight of Laurens; Thomas C. Nation of Anderson; Lewis C. Pusch of Sumter; Claud L. Stephens, Jr. of Winston-Salem, N. C.; Samuel M. Tickle of Pelzer; and Harold M. West of Pelzer.

---

#### OCEAN VIEW HOSPITAL IN OPERATION

One of Coastal South Carolina's most important developments, the Ocean View Memorial Hospital, is in full operation.

The new 50-bed medical center was built exclusively through subscriptions and donations without any federal aid. The majority of funds for the half-million dollar facility came from donations by local citizens and other interested boosters from the Carolinas. The fund-raising campaign began almost eight years ago.

Overlooking the Atlantic Ocean in the northern

section of Myrtle Beach, the Ocean View Memorial Hospital is constructed to provide for expansion as the area grows.

In addition to serving the citizens of Myrtle Beach and the surrounding coastal area, the modern hospital will be available to the thousands of vacationers who annually visit this famed seashore resort.

Administrator of the Ocean View Memorial Hospital is Manson Turner, a native of Laurens, who previously served as hospital administrator in Marion. His hospital experience also includes 20 years of service with the U. S. Navy.

Members of the Hospital board of directors are President C. C. Pridgen, Treasurer P. G. Winstead, Secretary Robert H. Jones, Lee H. Kent, Dr. S. C. Lind, Mrs. H. B. Springs, A. P. Gandy, Mrs. Elizabeth C. Patterson, and Charles Tilghman.

Thirteen physicians, surgeons and other specialists comprise the Ocean View medical staff.

Interest in the new Myrtle Beach Hospital is evidenced by the fact that applications have come from nurses and other prospective employees from all sections of the nation. Members of the present staff represent 15 different states and three foreign nations.

—*Navy Times*

---

#### DR. R. W. BALL RETIRES FROM NATIONAL GUARD

Dr. Robert W. Ball of Columbia has been promoted to brigadier general and retired from the S. C. National Guard.

General Ball began his military service in Charleston in June 1919, when he enlisted in Co. B, 118th Infantry. He was discharged as a sergeant in 1922 and later commissioned a first lieutenant in the Medical Corps in 1934. General Ball has served as commanding officer of the 201st Medical Battalion since its activation in June, 1947.

He attended Porter Military Academy in 1917, the University of the South at Sewanee and the College of Charleston, where he was graduated in 1927. He served his internship at Roper Hospital and at Children's Hospital in Philadelphia, Pa.

---

#### DR. FLEMING GETS AWARD FOR CANCER FIGHT

Dr. John M. Fleming, director of the Cancer Clinic at Spartanburg General Hospital for the past 24 years, was elected to receive the 1958 citation and medallion presented annually by the American Cancer Society's South Carolina Division to the most outstanding person in the state in the field of cancer control for that year, according to Brig. Gen. William N. Cork, Ret., newly elected president of the division.

The award, the highest honor to be bestowed by the division, will be presented at the annual spring meeting, generally held early in April, he said.

A native of Landford Station, Dr. Fleming has for 24 years been the guiding spirit behind Spartanburg County's fight against cancer, Gen. Cork explained.

Known as "Mr. Cancer Fighter," he became director of the Spartanburg General Hospital's Cancer Clinic at its inception in 1934 and has worked untiringly in this post. The clinic now serves five counties: Spartanburg, Cherokee, Union, York, and Laurens, and the patient load has increased from 30 in 1939 to 450 in 1958.

In addition to his outstanding work in diagnosing and treating cancer, Gen. Cork said Dr. Fleming has devoted a great deal of time and effort to the American Cancer Society's educational program.

It was through Dr. Fleming's influence that the Spartanburg County Foundation donated equipment for the Radio-active Isotope Laboratory to help in the treatment of cancer, the state division president said. Spartanburg County can boast a 90 per cent follow up program to all diagnosed cancer cases within its bounds, largely due to Dr. Fleming.

Dr. Fleming has written many articles on cancer for various papers and medical magazines. A graduate of Clemson College and of the Medical College of South Carolina, he served internship at Walter Reed Hospital in Washington, D. C., and a year of residency in obstetrics and gynecology at Columbia Hospital for Women, and a year of residency in surgery at Garfield Memorial Hospital, both in the same city. He was a commander in the U. S. Navy from 1943-1946.

Dr. Fleming has been a member of the American Board of Obstetrics and Gynecology since 1941, is a Founding Fellow of the American College of Obstetrics and Gynecology, originated in 1952. He helped form the South Atlantic Association for Obstetrics and Gynecology in 1938.

He is a member of the State of South Carolina Obstetrics and Gynecology Association, a member of the South Carolina State Medical Association, Spartanburg County Medical Association, the Southern Medical Association and a member of the staff of the Spartanburg General Hospital.

—*Greenville, (S. C.) News*

#### DR. J. A. WHITE RECEIVES HONOR IN EASLEY

Dr. J. A. (Tony) White was recently honored by the Easley Exchange Club when he was named Easley's "Citizen of the Year" for 1958.

"An Easley physician who finds time to combine a busy profession with a wholesome family life and contribute to his community through church leadership and civic service has been named Easley's "Citizen of the Year" for 1958.

He is Dr. J. A. (Tony) White. His selection was announced this week by the sponsoring Easley Exchange Club. A member of the First Methodist Church, he is Lay Leader there and is on the Board of Stewards. He is a vice president of the Easley Lions Club, Chief of Staff at the Easley Baptist Hospital and past president of the Pickens County Medical Society. Dr. White is also active in the County

Boy Scout Program.

He is married to the former Lillian Anderson of Laurens and they have five children."

Dr. White will be honored at the Exchange Club's annual banquet in February and his name entered in the club's Book of Golden Deeds.

On November 10, Pee Dee physicians got to quiz the doctor who was called in to help care for President Eisenhower in his most recent illness.

And it was all over a long-distance telephone circuit.

The program, called a "teleposium", gave area medics an opportunity to question Dr. Francis M. Forester, who was sitting in his office in Madison, Wis. Dr. Forester is chairman of the neurology division of the Wisconsin University School of Medicine.

First, Dr. Forester gave an address on subarachnoid hemorrhage. Simultaneously, slides were shown in Florence to illustrate the talk.

Then local doctors got a chance to put their questions to the Wisconsin physician.

The program marked the first such teleposium ever conducted for physicians in the South. It's a new method for doctors to do post-graduate work.

Drs. Walter Mead and W. R. Baroody were local moderators for the program, which was given in the Florence-Darlington TB Sanatorium.

The Anderson County Medical Society named Dr. William F. Lummus president of the organization at a meeting in November. Dr. Lummus succeeds Dr. H. J. Hancock. Other officers named for one year terms include Dr. J. H. Young, vice president; Dr. Robert Thompson, secretary, and Dr. J. W. Jackson re-elected treasurer.

#### 'OLD ROPER' TO GO

Charleston County plans to abandon "Old Roper" Hospital. And Old Roper is indeed in the throes of antiquation. The modern hospital has out-stripped it, and the old structure cries out for demolition.

But we pause, as would hundreds of physicians all over South Carolina, in tribute to its many years of service not only to Charleston County but to the entire state of South Carolina. Roper Hospital's role of service to the state consisted of its function as the teaching hospital for the South Carolina Medical College.

Practically every graduate of the medical college practicing today obtained his first patient experience in the long wards of Roper. There he found a vast variety of medical and surgical problems flowing from the population of what for so long was South Carolina's largest city.

One imagines many a South Carolina physician, surgeon and nurse learned of the plan to abandon Old Roper with some sentiment.

This hospital has been known as "Old Roper" since the construction some years ago of "New Roper," a



very fine hospital designed largely for paying patients.

It is understood that Old Roper is to be replaced by another large hospital which will carry on the functions of the Old Roper—except that of serving as a teaching hospital for the Medical College. That service is now performed by the new teaching hospital of the college itself, owned by the state, and an institution destined to become a great clinic for use by the entire state.

—*Columbia (S. C.) Record*

(Editorial note)

*The Record* is in error. There is no intention that Roper Hospital will cease to furnish teaching material to the Medical College, whose hospital is not large enough to meet all teaching requirements.

#### DR. N. S. RICHARDSON NOW IN DARLINGTON

Dr. Norman S. Richardson, Jr., a native of Darlington has begun the general practice of medicine in association with Dr. John M. Wilson.

Dr. Richardson was graduated from the Medical College of S. C. in 1957 and prior to coming to Darlington interned at the Columbia Hospital in Columbia.

#### PEE DEE MEDICAL ASSOCIATION Officers For 1959

Dr. Charlie Kingsbury, Florence ----- Pres.  
Dr. George Smith, Florence ----- Secretary  
Dr. Jim Greiner, Florence ----- Treasurer  
Vice Presidents:

Dr. J. O. Warren ----- Dillon Co.  
Dr. Waddy Baroody ----- Florence Co.  
Dr. Jim McAlpine ----- Marlboro Co.  
Dr. Jim Wideman ----- Marion Co.  
Dr. Louis Johnson ----- Chesterfield Co.  
Dr. Charles Aimar ----- Darlington Co.  
Dr. Harold Gilmore, Nichols, Editor, *The Bulletin*  
Mr. M. L. Meadors, Florence, S. C., Legislative News  
Mrs. T. B. Clark, Jr., Marion, S. C., Publicity Chairman for Woman's Auxiliary

#### ANNUAL MEETING OF THE COLUMBIA MEDICAL SOCIETY

The Annual Meeting for the election of officers was held in the State Room of the Hotel Columbia on December 8, 1958. Results of the election are as follows: Dr. Leland J. Brannon, President; Dr. Benjamin O. Stands, Vice-President; Dr. R. F. Haines, Secretary; Dr. R. G. Latimer, Treasurer; Dr. Buford S. Chappell, Editor of *The Recorder*; Member of Board of Censors, Dr. George H. Bunch; Member, Public Relations Committee, Weston C. Cook, M. D.; Delegates to S.C.M.A., Ben N. Miller, M. D., Kirby D. Shealy, M. D., Pierre F. LaBorde, M. D., William S. Hall, M. D.; Alternate Delegates, John R. Timmons, M. D., C. R. Holmes, M. D., W. T. Barron, M. D., A. E. Cremer, M. D.

#### RESOLUTIONS IN MEMORY

OF

HARRY F. WILSON, M. D., M.P.H.

The date of October 23, 1958, marks the day on which Dr. Harry F. Wilson was born into a better world and thereby the South Carolina State Board of Health sustained the great privation of a faithful and loyal director.

His keen intellect, his broad knowledge, his penetrating insights, and his many talents were used by him in furthering the public health movement in South Carolina. Except for four years spent in military service, Dr. Wilson had been with the South Carolina State Board of Health since 1930. Among the many positions which he held during his long worthwhile public health career were Director of the Horry, Beaufort, Dillon-Marion County Health Departments; Director of the Industrial Health Division; and Director of the Division of Laboratories. He was outstanding in his profession, giving genuine and constant devotion to his chosen field of endeavor.

Dr. Wilson was the possessor of a ready wit and a sparkling sense of humor. He was gentle and full of compassion, and enjoyed the admiration and respect of all those with whom he was associated as personal friends or professional colleagues. He stood squarely for all that was good, and with integrity served well his fellowman.

We feel deeply the departure of our friend and co-worker who has answered the call that has summoned him into that life "where age shall not weary nor the years condemn." Our sympathies are warm and real as we mourn the ending of his earthly career.

#### THEREFORE BE IT RESOLVED

that we, the Executive Committee of the South Carolina State Board of Health go on record as having experienced a great loss in the passing of one of our most valuable and highly regarded directors;

that a copy of these resolutions be placed on a page in our minute book, and a copy be sent to the grief-stricken family, in order that they may understand how sorely he will be missed by his co-workers and how sincerely they mourn his going away.

#### EXECUTIVE COMMITTEE OF THE SOUTH CAROLINA STATE BOARD OF HEALTH

By: G. S. T. Peebles, M. D.  
Secretary and State Health Officer

The 1959 Easter Seal campaign, February 27 to March 29, marks 38 years of continuous service to the handicapped by the National Society for Crippled Children and adults. You can help further this important work by giving to your Easter Seal Society in your vicinity before Easter Sunday.

If a crippling accident or disease strikes your family, let Easter Seals help you come back.

---

## ANNOUNCEMENTS

---

### THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

1430 Tulane Avenue  
Room 103  
New Orleans 12, La.

The twenty-second annual meeting of The New Orleans Graduate Medical Assembly will be held March 2, 3, 4, 5, 1959, headquarters at the Roosevelt Hotel.

---

### GREENVILLE POST-GRADUATE SEMINAR

Dr. Gordon Howle has completed the program arrangements for the annual Greenville Post-Graduate Seminar which will be held on April 14, 15 and 16 of 1959. The speakers which will be heard on this program will include

1. Dr. Edgar Hull, Professor of Medicine at L. S. U., New Orleans
2. Dr. Peter Gazes, Department of Medicine, Medical College of South Carolina, Charleston
3. Dr. Claude Frazier, Asheville, North Carolina
4. Dr. Benjamin Manchester, George Washington University, Washington, D. C.
5. Dr. Edward Boyle, Medical College of South Carolina, Charleston
6. Dr. Bob Bowman, Johnson City, Tennessee
7. Dr. J. Lamar Calloway, Duke University, Durham, North Carolina
8. Dr. John Parks, Dean of George Washington University, Washington, D. C.
9. Dr. Fred Kredel, Medical College of South Carolina, Charleston
10. Dr. R. A. (Daddy) Ross, University of North Carolina Medical School, Chapel Hill, North Carolina
11. Dr. R. A. Greenblatt, University of Georgia, Augusta, Georgia
12. Dr. Arthur Seigling, Medical College of South Carolina, Charleston
13. Dr. John Cuttino, Medical College of South Carolina, Charleston

---

### EMORY UNIVERSITY SCHOOL OF MEDICINE

Announces A Postgraduate Course in  
CONGENITAL HEART DISEASE  
March 26, 27, and 28, 1959  
at Grady Memorial Hospital

#### FACULTY:

- Dr. S. Gilbert Blount, Jr., Associate Professor of Medicine, University of Colorado, Denver, Colorado
- Dr. Richard G. Lester, Assistant Professor of Radiology, University of Minnesota, Minneapolis, Minnesota

Dr. John W. Kirklin, Assistant Professor of Surgery,  
University of Minnesota Graduate School,  
Rochester, Minnesota

Members of the Faculty of Emory University  
School of Medicine

#### FOR FURTHER INFORMATION WRITE:

Postgraduate Education  
69 Butler Street, S. E.  
Atlanta 3, Georgia  
FEE—\$50.00

---

### AUGUSTA GRADUATE ASSEMBLY

April 6 and 7, 1959  
Bon Air Hotel

Sponsored by Richmond County Medical Society,  
Augusta, Georgia.

Approved Category One for 9 hours credit in co-operation with the American Academy of General Practice.

---

### REPORT ON ACTIONS OF THE HOUSE OF DELEGATES AMERICAN MEDICAL ASSOCIATION TWELFTH CLINICAL MEETING DECEMBER 2-5, 1958 MINNEAPOLIS

MINNEAPOLIS, December 5—Health care of the aged, the report of the A. M. A. Commission on Medical Care Plans, osteopathy, expansion of medical education facilities, the Association's administrative changes, the report of the Committee to Study A. M. A. Objectives and Basic Programs, and voluntary health organization fund raising were among the wide variety of issues considered by the House of Delegates at the American Medical Association's Twelfth Clinical Meeting held December 2-5 in Minneapolis.

Dr. Lonnie A. Coffin of Farmington, Iowa, was named the 1958 General Practitioner of the Year for his outstanding contributions to the health and civic affairs of his home community. Dr. Coffin, who is the first Iowan to receive the annual GP award, accepted his gold medal on behalf of "all the men who have dedicated their lives to the general practice of medicine."

Speaking at the Tuesday opening session of the House, Dr. Gunnar Gundersen of La Crosse, Wis., A. M. A. President, called upon the medical profession to exert leadership and imagination in meeting the problems of these changing times. Urging practical actions to solve medico-economic challenges, Dr. Gundersen declared that "the time has passed for policies based on generalities, platitudes and flag-waving." He also suggested that the Association offer support and cooperation to proposals for an International Medical Year.

Governor Orville L. Freeman of Minnesota, who also addressed the opening session, asked for "the help of the leaders of the medical profession in work-

ing out a program that will most adequately meet the needs of our older citizens for health care and services of the highest quality."

With half a day still to go, total registration Thursday evening had reached 4,880, including 2,870 physicians.

#### *Health Care of the Aged*

Responding to Dr. Gundersen's call for action and Gov. Freeman's plea for help in meeting the health care needs of the aged, the House of Delegates adopted the following proposal submitted by the Council on Medical Service and endorsed by the Board of Trustees:

"For persons over 65 years of age with reduced incomes and very modest resources, it is necessary immediately to develop further the voluntary health insurance or prepayment plans in a way that would be acceptable both to the recipients and the medical profession. The medical profession must continue to assert its leadership and responsibility for assuring adequate medical care for this group of our citizens.

"Therefore, the Council on Medical Service recommends to the House of Delegates the adoption of the following proposal: That the American Medical Association, the constituent and component medical societies, as well as physicians everywhere, expedite the development of an effective voluntary health insurance or prepayment program for the group over 65 with modest resources or low family income; that physicians agree to accept a level of compensation for medical services rendered to this group which will permit the development of such insurance and prepayment plans at a reduced premium rate."

In order to effect the immediate implementation of such a program, the House directed that copies of the proposal be distributed to medical society approved plans, including Blue Shield and private insurance programs, requesting their cooperation.

#### *Commission on Medical Care Plans*

The long-awaited report of the Commission on Medical Care Plans, appointed at the 1954 Clinical Meeting in Miami, was discussed for two hours at a reference committee hearing, but the House decided to defer action until the June, 1959, meeting. In so doing, the delegates adopted this statement:

"We respectfully suggest to the constituent associations reviewing the report in the interim, that their attitude regarding the report will be clarified if they arrive at some decisions in regard to the following basic points:

"1. *Free Choice of Physician*—Acknowledging the importance of free choice of physician, is this concept to be considered a fundamental principle, incontrovertible, unalterable, and essential to good medical care without qualification?

"2. *Closed Panel Systems*—What is or will be your attitude regarding physician participation in those systems of medical care which restrict free choice of physician?

"These suggestions acknowledge that the policy of the American Medical Association to encourage and support the highest quality of medical care for all patients remains unchanged. They question, however, whether attitudes toward the free choice of physician and the closed panel system may be undergoing evolutionary change."

The House recommended that the Board of Trustees invite the constituent associations to forward their replies to these questions to the Executive Vice President 60 days in advance of the June, 1959, meeting.

#### *Osteopathy*

Considerable discussion centered on a resolution which would have recognized that constituent medical associations have the right to establish the relationship of the medical profession to the osteopathic profession within their respective states. The House decided, however, that the resolution in question did not offer the appropriate solution to the osteopathic problem. Instead, the delegates requested the Judicial Council to review past pronouncements of the House on osteopathy and the status of the laws of the various states in this regard. The Council was asked to present its report and recommendations at the June, 1959, meeting. The House "noted with favor that the American Osteopathic Association has amended its objectives as stated in its constitution by deleting reference to the cultism of Andrew J. Still."

#### *Medical Education*

The House approved a statement by the Council on Medical Education and Hospitals supporting the development of additional facilities for basic medical education, and it urged the entire profession to give that policy strong support in order to correct misinterpretations of the Association's viewpoint regarding the supply of physicians.

"American medicine," the statement points out, "fully recognizes the needs being brought about by the increasing population, social and economic trends, and the changing dimensions of medical knowledge and its application." Urging careful analysis of those needs, the statement says that existing medical schools should consider the possibility of increasing their enrollments and developing new facilities. It also declares that American medicine has the responsibility to encourage the creation of new four-year medical schools and two-year basic science programs by institutions of higher education which can provide the desirable setting.

#### *A. M. A. Administrative Structure*

A Board of Trustees report on the administrative structure of the Association was approved by the House, which termed the reorganization of the headquarters staff as a long and important step in the right direction. The report informed the House that the Chicago staff has been divided into the following seven divisions: Business Division, Law Division, Communications Division, Field Division, Division of Scientific Publications, Division of Socio-Economic



Activities and Division of Scientific Activities. The latter two are still in the process of development and are temporarily under the direction of the Assistant Executive Vice President. The Board also reported that the Committee on Legislation has been renamed the Council on Legislative Activities, with the Director of the Law Division as Council secretary. This new council will undertake an enlarged, strengthened legislative program, closely coordinated with the activities of the new field staff and the Washington Office. The latter also has been reorganized, with overall direction coming from Chicago.

#### *A. M. A. Objectives and Basic Programs*

The House received and commended the report of the Committee to Study A. M. A. Objective and Basic Programs, which it said may be a significant milepost in the Association's history. In approving one of the committee's recommendations, the House referred to the Council on Constitution and Bylaws the following suggested amendment of Article II of the Constitution: "The objectives of the Association are to promote the science and art of medicine and the betterment of public health and an understanding of the socioeconomic conditions which will facilitate the attainment of these objectives."

The House also recommended that the Board of Trustees establish a mechanism which will assume the responsibility for promoting active liaison with each national medical society. "In the scientific fields," the House declared, "the role of the A. M. A. should be primarily that of leadership, but every endeavor should be made to bring about coordination of the special fields of scientific interest of the other national medical organizations." The delegates also approved a recommendation that the Board of Trustees give serious consideration to opening the publications of the Association to a free and open discussion of socioeconomic problems applicable to medicine.

#### *Fund Raising*

Once again considering fund raising problems which have arisen since development of the concept of united community effort, the House passed a resolution which pointed out that the action taken last June in San Francisco has been interpreted by some as disapproving the inclusion of voluntary health agencies in United Fund drives. It then stated that "the American Medical Association neither approves nor disapproves of the inclusion of voluntary health agencies in United Fund drives." The resolution also requested the Board of Trustees to arrange a top-level conference with the voluntary health agencies, the United Funds and other parties interested in the raising of funds for health causes, with a view toward resolving misinterpretation and other difficulties in this area.

#### *Miscellaneous Actions*

In dealing with a wide variety of other subjects, the House also:

Took notice of the recent restrictive changes in the

*Medicare* program; expressed regret at the substitution of federal facilities for private care in the areas mentioned, and urged the Association to encourage the reestablishment of services under the free choice principle to accomplish the original intent of the act;

Recommended that the Social Security Act be amended by Congress to permit states to combine the present four *Public Assistance* medical programs into a single medical program, administered by a single agency and making available uniformity of services to all eligible Public Assistance recipients in the state;

Authorized the Council on Medical Service to sponsor at the earliest practicable date a *Congress on Pre-paid Health Insurance*;

Approved a plan to develop "*Buyers' Guides*" which will be sent to physicians to help their patients analyze the merits of available health insurance programs;

Approved a Bylaw amendment which will allow *dues exemptions* for interns and residents serving in training programs approved by the Council on Medical Education and Hospitals;

Called to the attention of all individuals or institutions responsible for *intern and resident* training that medical services provided to patients in hospitals are the responsibility of duly licensed physicians;

Encouraged the voluntary registration of the *para-medical personnel* who assist physicians, but opposed the extension of governmental licensure and governmental registration at this time;

Heartily approved and lauded the purpose, content and format of *The A. M. A. News* and recommended continuance of the publication under its present and established policies;

Agreed with the Committee on Medical Practices that *relative value studies* should be conducted by each constituent medical association but not on a national or regional basis by the A. M. A.;

Urged each constituent society to establish a committee on *rehabilitation* to carry out activities recommended by the Board of Trustees;

Called for continued activity at all levels to stimulate the development of effective *poliomyelitis inoculation programs*;

Suggested that the Association take immediate steps toward developing a plan whereby reserve medical units and individuals not immediately involved in military operations could be used to supplement *civil defense* operations, and

Expressed gratitude and appreciation for the long years of devoted service by *Dr. Austin Smith*, who has resigned as Editor of *The Journal of the American Medical Association*.

At the opening session, six state medical societies contributed a total of almost \$250,000 to the American Medical Education Foundation. The gifts were: California, \$150,305.75; Indiana, \$35,110; New Jersey, \$25,000; New York, \$19,608; Utah, \$9,977.50

and Arizona, \$8,657.50. In addition, the American Medical Association announced a contribution of \$100,000 to the Foundation.

It also was announced on the opening day of the meeting that Dr. W. Linwood Ball of Richmond, Va., A. M. A. Vice President, had been appointed to the Board of Trustees to fill the vacancy caused by the recent death of Dr. Warren Furey of Chicago. Dr. Ball, who will serve on the Board until next June, said he will not be a candidate to succeed himself.

F. J. L. Blasingame, M. D.  
Executive Vice President  
American Medical Association

## HEALTH INSURANCE

Cooperative action on the part of doctors, hospitals, and insurance organizations is needed now, if the American people are to avoid government controls on medical care and treatment, a health insurance spokesman warned a group of doctors in New Haven, Conn. Joseph F. Follmann, Jr., Director of Information and Research of the Health Insurance Association of America, told a meeting of the Connecticut Society of Internal Medicine that spiraling medical costs are the concern of all those who are engaged in providing health care through the present voluntary system.

"No matter of mutual concern is more urgent than the rising cost of health care," Mr. Follmann stated. "No element in the Bureau of Labor Statistics' Cost of Living Index has risen as much as health care costs since World War II."

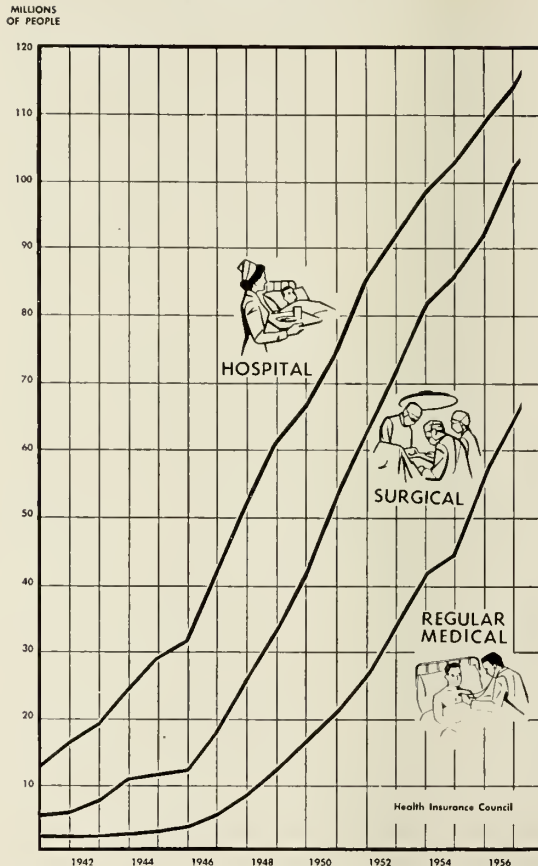
While doctors' fees have lagged in the aggregate index of medical care costs, Mr. Follmann reported that hospital, drug, and miscellaneous costs have risen markedly. "We realize that even in a prosperous America," he cautioned, "it is possible for health care to be priced out of the reach of the mass of people."

Mr. Follmann urged that prompt measures be taken by doctors and hospitals to restrain the present upward trend in such costs. Because the doctor controls the course of treatment, he suggested, over-utilization of medical treatment and extravagant care, which add to the health care burden, can be prevented. Unnecessary hospitalization must also be guarded against, according to the speaker. "That nearly all physicians stand firm against such abuses," he added, "is a tribute to their individual integrity and the ethics of the profession."

Mr. Follman cited a recent survey in Michigan which revealed that 25% of the patient days spent in general hospitals by Blue Cross subscribers there "constituted unnecessary hospitalization."

"Our traditional respect for the profession of medicine is epitomized by the fact that it is the only profession or business permitted to establish its own charges almost entirely without the policing effect of competition or the imposition of public regulation," he said. "Because the individual physician is largely unfettered in setting the charges for his services,

Growth of Hospital, Surgical, and Regular Medical Expense Coverage



rigid self-discipline is of utmost importance to the preservation of private practice."

Most doctors, he continued, resist raising their fees simply because health insurance is involved. Such a practice, he emphasized, is an abuse of the insurance principle, and can add a "staggering figure" to the total cost of the nation's medical bill. Organized medicine in 1954 recognized this danger, said Mr. Follmann, when the House of Delegates of the American Medical Association at its clinical session stated, "To use insurance as an excuse to revise professional fees upward is but to contribute to the defeat of its purpose."

The health insurance official called for more economic methods of treatment, and the use of less costly facilities to keep medical care within the reach of the public. Moving patients out of general hospitals and into nursing homes or geriatric sites where possible, and more effective scheduling of patients in and out of the hospital, he said, can result in substantial savings. "Your profession can continue to emphasize early diagnosis to prevent later costly disability," he observed, "and can perfect rehabilitation techniques to restore patients to economic usefulness."

Insurance companies also have a vital role to play

in the fight against rising costs, he told the assembled doctors. Insurers must continue to apply their energies in providing the best and most effective utilization of the health insurance dollar. Health insurance can act as a brake on higher doctor and hospital bills, Mr. Follmann suggested, as is evidenced by the application of the deductible and co-insurance features in policies, notably major medical expense protection. Such insurance does not require hospitalization for coverage of medical bills, he explained, and consequently patients need not tax hospital facilities when they may be cared for just as well in out-patient clinics.

Mr. Follmann expressed his confidence in the voluntary system of providing medical care, and in the ability within such a system to improve techniques and services which will benefit all of society. "We who know voluntary health insurance and the private practice of medicine," he concluded, "believe in their inherent capacity to provide an adequate measure of quality care, soundly financed, for nearly all of the American people. As through joint effort we succeed in this, we will strengthen the whole social and economic structure upon whose preservation depends the maintenance of those freedoms and opportunities that we conceive to be the essence of the American way of life."

---

## PERSONALITIES

---



DR. ELBERT ALLEN SIMMONS

Dr. Elbert Allen Simmons of Timmons ville has been a "day and night" doctor for fifty years and he's proud of it. And furthermore he's still going strong at 77. He's proud of that, too.

He began his professional career in Timmons ville

in association with his brother-in-law, Dr. Albert G. Eaddy.

In those days the horse and buggy rushed the doctor to the bedside of the dying or gave the stork a race but as the years passed, so did the horse as a method of transportation. It was then Dr. Simmons graduated to a "Model T" Ford as the "steed" that carried him about the countryside on his errands of mercy, of joy and sorrow.

During the era of the "Model T" he used up 17 of them. But he can recall times when he made his rounds on a motorcycle. Those were the early days. But then, as now, no one called for Dr. Simmons and went unanswered.

Today he visits his patients in a sleek powerful modern automobile.

Just as his mode of taking his aid and comfort to the ill and injured of Timmons ville and the surrounding area has progressed with the times, so he has kept abreast of the advances in science and medicine. He calls himself a "country doctor" but he is country only in the sense of being one of the few remaining family doctors whose care and affection has embraced three generations of many Timmons ville area families.

He was born in Columbia, Tyrrell County, North Carolina on June 3, 1881. From there the family moved to Johnsville, S. C. in 1882.

Between his busy rounds as practicing physician, Dr. Simmons has still found time for church and civic work. For 25 years he has taught the Men's Bible Class of Timmons ville Methodist Church. Here, too, he is practically never absent.

His civic activities would tire a younger and less busy man but he seems to thrive on his "giving of himself" and always manage to find the time for worthy activities.

Dr. Simmons is husband and father too. On April 6, 1910 he married Miss Mamie Mims of Timmons ville and they became the parents of five children.

Many children other than his own have looked to him with love and trust for the easing of their pains and the comforting of their fears. Over the years hundreds, young and old, have known his healing touch. His fingers have not lost their skill nor his voice its comforting magic. His is a vanishing breed—a symbol of service—the country doctor.

---

Easter Seals do more than serve crippled children and adults in care, treatment and rehabilitation programs. They help maintain equally important national programs of research and education. By contributing to Easter Seals, you promote the well-being of the nation.

---

Your Easter Seal Society is one of 1,700 affiliates of the National Society for Crippled Children and Adults in all 49 states, District of Columbia and two territories—Hawaii and Puerto Rico. Wherever there are crippled children there are Easter Seals at work.



---

## DEATHS

---

### DR. HAL B. HOLMES

Dr. Hal B. Holmes, 60, practicing physician and surgeon of Conway, died suddenly at 10:30 p. m. December 27 of a heart attack while having dinner with friends at Myrtle Beach.

Dr. Holmes was born April 30, 1898, in the Good Hope community of Horry County. He was first honor graduate of the Class of 1917 at Burroughs High School. He entered the Navy during World War I and after completing his tour of duty he entered the University of South Carolina where he was an honor graduate. Then he enrolled at the Medical College of South Carolina where he finished in the top seven of his class in 1926. After interning at Charleston, Dr. Holmes opened his office in Conway for the practice of general medicine and surgery, an office he maintained until his death. He was active in the organization of Conway hospital and has been on the medical and surgical staff of that institution since its inception. He was a member of the Horry County Medical Society, the Pee Dee Medical Society, the Tri-State Medical Society and the American Medical Association. He has been active in the civic, business and cultural life of Conway and was a member of the First Baptist Church of Conway where he served on the board of deacons.

He was a member of the board of directors of the Peoples National Bank of Conway, Lions, American Legion and was a Scottish Rite Mason.

On November 11, 1957, Dr. Holmes was presented the citizens distinguished award plaque, which was a highlight of the Veterans Day activity. The plaque was presented in behalf of the Conway post of the American Legion.

Dr. Holmes was a family physician with a zeal for his profession. Records of the county show that Dr. Holmes had cared for more than half the indigent of his community.

---

### DR. J. M. WILLCOX

Dr. John McIver Willcox, 60, of Darlington died January 7 in a Florence hospital after an illness of two years.

Dr. Willcox was born in Marion November 9, 1898. He graduated from St. John's High School in Darlington in 1916. After taking his premedical work at Presbyterian College and the College of Charleston, he graduated from the Medical College of South Carolina in 1923.

He served his internship at McLeod Infirmary in Florence and came back to Darlington to begin general practice with the late Dr. C. C. Hill. After two years in association with Dr. Hill, he opened his own office. In 1956, Dr. Willcox was retired from active practice due to his health.

He was a member of City Council of Darlington for 24 years and served a number of terms as mayor-pro-tem. He was a member of the Darlington Presbyterian Church.

---

### DR. W. M. MOORER

Dr. William Murray Moorer, 78, of Lodge, died January 5 in the Colleton County Hospital after an illness of a month.

Dr. Moorer was a practicing physician at Lodge for 54 years. He was born in St. George, a son of the late Dr. Pinckney L. Moorer and Mrs. Martha Murray Moorer, both of old Colleton County.

---

## BOOK REVIEWS

---

*ELECTROCARDIOGRAM.* By Michael Bernreiter, M. D., University of Kansas Medical School; J. B. Lippincott Company Publishers, Philadelphia, 1958. Price \$5.00.

This is a comparatively short book with more illustrations than text. The usual introductory explanations and diagrams of electrophysiology are included, and these are done in a manner which is both clear and concise, omitting controversial material. Medical students and other beginners in electrocardiography will appreciate the simplicity with which the fundamentals are set forth.

However, clinicians who are accustomed to interpreting tracings in the light of the clinical findings instinctively think more in terms of significance than descriptions of abnormalities. For them the book has little to offer other than illustrative tracings of abnormalities which have been more comprehensively discussed in numerous previous volumes on the subject.

Dr. Bernreiter's book is a well organized compendium of his lectures on electrocardiography to medical students at the University of Kansas Medical School. It should prove helpful to students in other institutions who seek a better understanding of the fundamentals of electrocardiography.

Dale Groom, M. D.

---

*WHAT WE DO KNOW ABOUT HEART ATTACKS.* John W. Gofman, M. D., Editor. G. P. Putnam's Sons—New York, 1958. \$3.50.

This book gives a simple account of our knowledge of heart attacks (coronary thromboses). A discussion is given to the relationship of diet, emotion, obesity, hypertension and other factors to the development of this disease. The material is presented so that it can clearly be understood by the layman. It will give the person with heart disease a clearer picture of what this disease is and some of the treatment and preventative measures advised by his physicians. However, certain aspects of the relationship of blood fats to heart disease, which at present are controversial,

are over-emphasized. The analysis and significance of the blood lipo-proteins is of great interest to the physician and may prove helpful to the intelligent layman who has followed the research problems in cardiovascular diseases. However, this book is probably of greater interest to the general practitioner of medicine who does not have the time to keep up with the recent research developments in coronary artery heart diseases.

Peter Gazes, M. D.

**EMERGENCY WAR SURGERY NATO HANDBOOK.** U. S. Department of Defense. U. S. Government Printing Office. 1958. Price \$2.25.

The purpose of this book is to re-emphasize the principals of traumatic surgery and the care of the wounded during the immediate post-wounding period and until transfer for definitive care is possible. This manual more than fulfills its aim. The division into four sections is organized to present the varied aspects of traumatic surgery.

1. Types of wounds and injuries
2. Response of the body to wounding
3. General considerations of wound management
4. Regional wounds and injuries

There is much valuable information in this book. It is a well organized, well written and scholarly treatise on war trauma. Except for the logistic problems of the care of mass casualties all contained in this book is applicable to the treatment of civilian trauma. This reviewer was very much impressed with the clear succinct exposition. An abundance of detail has been excluded and consequently the larger problems in the care of casualties are alluded to throughout the book. Where detail is presented it is applicable to the situation.

The surgeon who is interested in trauma will find this a very excellent dissertation and guide in his management of similar cases. Although wide civilian distribution of this book is unlikely, it can be recommended for the surgeon's library and the use of house physicians in the emergency room. This book could serve well as a basic text on its subject in the medical school curriculum.

Bernard E. Ferrara, M. D.

**REGIONAL ILEITIS** by B. B. Crohn and H. Yarnis, 2nd Edit. Grune and Stratton, New York 1958. Price \$7.25.

Dr. Crohn and his associates have brought up to date their vast experience of the past several decades on regional enteritis. Since he was the first to define this condition in a precise and comprehensive manner, he speaks with authority. It is interesting to note that a simple by-pass procedure is now accepted as an adequate operation for terminal ileitis particularly with chronic obstructive symptoms. This book should be available to any doctor who might be called upon

to diagnose or treat this interesting disease.

F. E. Kredel, M. D.

**POISONING.** W. F. von Oettingen, M. D. 1958. Philadelphia: W. B. Saunders, Publisher. 627 Pages. Price \$12.50.

This is the second edition of Poisoning by the author whose chief aim is to supply a single source of information needed by the practicing physician for the accurate detection, diagnosis and successful treatment of poisoning.

The author attempts to organize this book in a fashion which will most readily aid the medical practitioner in the diagnosis and treatment of poisoning. Part I of this text discusses the classification of poisons, forensic aspects and responsibilities of the physician, and the emergency measures and equipment necessary for treating poisoning.

Part II takes up the clinical aspects of poisoning. The author emphasizes the importance of obtaining accurate histories in the diagnosis of poisoning; and he stresses the functional pathology observed in the course of the medical examination. He presents the signs and symptoms by body systems—allegedly for ease of reference—discussing them at length in the course of the clinical study. Also in this section of the book, there are chapters on blood and urine changes in poisoning and the laboratory tests for detection of alterations or abnormalities. Such tests are possible in the average hospital's laboratory. This portion of the book is a most valuable adjunct to any Poison Control Center or physician who sees any appreciable number of poison cases.

Part III of the book takes up the clinical management of poisoning. Here emphasis is placed on the techniques available for removal of toxic agents as well as the symptomatic treatment which must be used at the same time or even preceding removal of the poison.

Part IV, the largest section of the book, is an alphabetical listing of poisons. Under each poison there is a short discussion of the clinical picture and treatment required. This section seems to the reviewer to be the weakest portion of this book since there are many common household poisons which are not encountered in the alphabetical listing. Especially notable by their absence, are the common household furniture polishes and waxes so commonly encountered in childhood poisoning. Too often, treatment of common poisons is sparse and lacking in actual specific recommendations as to dosage of drugs used.

The author, on the whole, has done an admirable job of attempting to cover the tremendous subject of poisoning in one book. This reference will be a valuable addition in the medical practitioner's library as well as to any Poison Control Center's reference library.

Henry W. Moore, M. D.

*COLD INJURY, GROUND TYPE* by Col. Tom F. Whayne and Michael E. DeBakey, Office of Surgeon General U. S. A., 1958, 750 pages. For sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Price \$6.25.

This book is a comprehensive report on injuries from cold in World War II encountered by the Army. In all theatres the number of injuries treated was 91,000. The feet and toes were most often affected, as one would surmise. Injuries in the air or at sea are not included.

The clinical picture and incidence in relation to environmental and tactical situations are well described. The chapters on pathogenesis, diagnosis and therapy are of value to every doctor who may treat such cases and are very well illustrated.

The prophylactic value of proper clothing and especially of foot-gear is emphasized. Shoes and socks that are too tight constrict the circulation. Frequent change of wet socks was found also to be important. Surgeon General Hays in his foreword states that many of these injuries may have been prevented if the experiences in World War I had been better recorded and applied. This book lays a foundation for rational prevention and treatment now and for the future. It contains many helpful implications and methods of great value for civilian as well as military practice. Obtainable at very modest cost it should have a wide distribution among doctors in practice, residents and medical students.

F. E. Kredel, M. D.

*IDEALS IN MEDICINE—A CHRISTIAN APPROACH TO MEDICAL PRACTICE.* Edited by Vincent Edmunds and G. Gordon Scorer. The Christian Medical Society, Chicago. Price; \$3.00.

Writing as a clergyman, this reviewer found the book filled with insights that should be helpful to physicians and clergymen alike. This writer found the book in sections, inspiring. Since the book was written by English physicians and one English minister, it would be helpful to the American reader if the book had included some information about the various contributors. The only information given is their names, with the usual initials denoting degrees and medical affiliations.

While the writer was impressed with the apparent soundness of professional approach and with the degree of Christian commitment of all the writers, varying degrees of biblical theological orientation were evidenced by the several writers.

This particular writer completed and reread the chapter on Faith Healing with a sense of dissatisfaction, which he found difficult to define. Much more needs to be said on this complex subject than could be said here, though there is little that he could take issue with. He questions seriously the statement on page 144 that the Bible clearly manifests that God's prime interest is in spiritual holiness, and not in physical well being.

With this demurrer only, this reviewer would recommend *IDEALS IN MEDICINE* as an excellent book for the clergy to read and to make available to the physicians in their congregations.

The Rev. J. R. Horn, III, B. D.

*IDEALS IN MEDICINE—A CHRISTIAN APPROACH TO MEDICAL PRACTICE.* Edited by Vincent Edmunds and G. Gordon Scorer. The Christian Medical Society, Chicago. Price; \$3.00.

The editors along with eleven contributors have compiled a treatment of the subject of ethics in medicine with particular emphasis on Christian ideals involved therein. The book is primarily aimed at fourth-year medical students but is good reading and thought-provoking for all physicians. The authors are British but the reviewer found no difficulty in reading this book. Many facets of the life of the general practitioner and specialist, are covered including personal standards, personal satisfaction, and the distinctive ethical code of the Christian doctor. A particularly fine chapter is the one dealing with the doctor's relationships with his patients, their families, and his colleagues. There is good coverage of the Christian attitude toward sex problems, abortions, sterilizations, euthanasia, and faith healing. Included is also a chapter on the medical missions.

The reviewer would like to see this made required reading for fourth-year medical students.

Walker M. Hart, M. D.

*PSYCHOPATHOLOGY OF COMMUNICATION.* Paul H. Hoch, M. D. and Joseph Zubin, Ph. D. Grune & Stratton, New York 1958.

This book is another worthwhile advance in the progress of psychological psychotherapy. By its inclusion of the thinking of its 17 writers, from all parts of the country and Canada, one gets the very definite impression that the principles of psychopathology which have to do with the way people think, and act and feel under anxiety situations is being rapidly accepted as one of the newer tools of medicine. What is happily, and noticeably absent from the book, is an overemphasis upon theory, and instead a unified attempt to demonstrate the importance of technique. One of the articles brings this out clearly in showing that psychological psychotherapy, with its use of the content material of psychopathological processes acting between doctor and patient, is the true and only basis for modern psychiatry. Drugs of any kind, electric shock therapy, and various other psychological measures and means are aids and not ends in themselves toward the main goal of all psychological psychotherapy, namely the communication between therapist and patient of psychological processes involved.

Anything that is done with this end in view is acceptable, provided that one is willing to determine



whether or not a patient is able to undertake the exploration of these psychopathological processes. The therapist, himself, must know as much as he can about the significance and the depth of the psychological factors, or processes, so that he can determine how far, and how deeply each patient can go in this work.

This book also represents another step in demonstrating that modern psychoanalytic therapy is basically the same as psychological psychotherapy. The difference lies, not in theory, but in application, and makes it essential that the therapist measures his own abilities as one of the communicants, as well as measuring the emotional capabilities of the patient as the other communicant.

This book is a hallmark of technical developments of psychotherapy, and probably will be regarded in the future as a classic text.

Norton L. Williams, M. D.

---

**CONVULSIVE DISORDERS OF CHILDREN.**

Dora Hsi-Chih-Chao, M. D., Ralph Druckman, M. D., and Peter Kellaway, M. D. Baylor University College of Medicine, Houston. 151 pages. 25 Figures. Price \$6.00. W. B. Saunders Company, Philadelphia.

This handbook represents a general survey of the subject of convulsive disorders of children. It is an expansion of a booklet used for instruction of house staff officers and workers in the clinic of Baylor University College of Medicine. It is a brief survey of the subject without much emphasis on any phase other than the clinical. There is little attempt to go into the basic mechanisms and theories underlying convulsive disorders, and the book is intended to be a short reference book rather than a complete discussion.

This book should serve as a useful member of a reference shelf in a clinic or hospital, and should be handy for house officers and students. It adds little to the knowledge of those who have worked with convulsive disorders for some time, and does not pretend to be a complete discussion. The material which it presents is well organized and lucid.

J. I. W.

---

**CALLANDER'S SURGICAL ANATOMY**, Fourth Edition, by B. J. Anson and W. G. Maddock, 1958, W. B. Saunders Co., Philadelphia. Price \$21.00.

Callander has been the surgeon's *vade mecum* for twenty-five years. The authors have continued the general arrangement and added remarks on the significance of various anatomical areas in relation to present day surgery. Many new illustrations from the recent literature have been inserted, some of which are less diagrammatic than those in previous editions and somewhat reduced in size. Every doctor who practices major surgery should have a copy of Callander. It is also most useful for students and house staff.

F. E. Kredel, M. D.

**ADVANCES IN ELECTROCARDIOGRAPHY.** Charles E. Kossmann, Editor. Grune & Stratton—New York 1958. Price \$9.75.

In this book the author presents advances in electrocardiography made during the period 1946 to 1956 under four categories: The Source of Potential, The Conducting Medium, The Spread of Excitation and Recovery, and Rhythms. A complete fundamental approach was used instead of a clinic or empirical approach. The advances have been so numerous and complex that even the physician with an intense interest in electrocardiography has had difficulty in keeping abreast of and understanding them. However, this book fulfills this need by giving a clear understanding and integration of these advances. It is of great benefit to the cardiologist and to the average internist since it gives them a background for understanding and interpreting electrocardiograms in their clinical practice. Naturally, the average general practitioner does not have an adequate background to gain much from this book.

---

**PHYSICAL DYNAMICS OF CHARACTER STRUCTURE.** Alexander Lowen, M. D. Grune and Stratton, New York 1958.

The author of this book is known in the field of psychoanalytic endeavors, as a "Reichian", that is, a follower of Wilhelm Reich. Dr. Lowen is executive director of the Institute for Bioenergetic Analysis in New York.

This book purports to outline a new dimension in psychoanalytic therapy, and as Reich himself has in the past "out-Freuded" Freud in the overemphasis upon sexual expression, so this author has tended to emphasize bodily form and movement in analytic therapy. In other words, he observes carefully, the physical skeletal structure of patients, not only in terms of their body structure, but also their movements. He, himself, emphasizes the importance of the lower half of the body, particularly pelvis and legs.

This book, of course, obviously emphasizes the aggressive, expressive, discharging elements of physical, and therefore sexual, expression. It has probably been a great source of puzzle to many people in the medical field to understand the reason that so much emphasis in the past psychoanalytic theory has been placed upon physical and erotic elements to describe human feelings and behavior. Too many people, not conversant with the history of the psychoanalytic movement, fail to realize that the search for emotional security and mental health lies not in completed, concrete acts, nor upon actual deeds, but in a variety of well-convicted attitudes to handle many situations of living.

This book, if looked upon only as a theory of human nature, therefore can be criticized in its overemphasis of physical means of expression. Yet, beneath all this, and even hidden in the content of this book, is the emphasis upon the use of all possible

technical means in the total observations of the patient.

This book can only be appreciated by those who are willing to see that psychoanalysis in its most modern form is struggling to emphasize technique, rather than theory. This book, therefore, represents a vestige of old Freudian thinking, with an emphasis upon theory, rather than technique. If looked at in this light, it could be very valuable to those attempting to understand the importance of the technical advances being made to reach the hidden recesses of the human mind.

Norton L. Williams, M. D.

British patients are remarkably similar to American. It is always the nicest of them who get the worst diseases, and the least pleasant who bear the most minor troubles with the least fortitude. They have also, as in America, a high degree of literacy—with the result that their education enables them to read, mark, learn and inwardly digest the vast amount of ignorance which is published daily. In general patients learn more and think less—their medical knowledge is greater than ever before, and their wisdom and judgment are less.

We have been through the phase of loss of confidence in the family doctor, through the flight to the specialist, and I think through the phase which consists of the flight to the machines which lie behind the specialist. For after ten years of the National Health Service so many patients have so easily obtained access to the best specialists and the best electrical and chemical diagnostic machines, that many have come to realize that medicine is not so simple after all; that even the cleverest men are unable sometimes to make a diagnosis, and that quite often there is no treatment available despite the recent advances in science. Furthermore, as Britain is geographically a small country, it is not possible to believe that the maintenance of one's disease is due only to not having been able to reach the right medical centre. It is virtually possible for anyone and everyone to get to any centre. One result, in my opinion, of the greater ease with which British patients can now obtain the best specialist care, is the realization that Medicine still has great limitations and that, therefore, there is still something to be said for trying to remain well.

John R. Ellis  
*The Pharos*, 21;3.

---

## SCISSORISMS

---

### PREACHER DELIVERS SERMON ON SANITARY PRIVIES

The sanitary privy was once the subject for a sermon by a Negro preacher in South Carolina, according to the thesis of a medical student who was writing

on the work of Dr. R. W. Ball. Dr. Ball was county health officer in Richland County. A Negro preacher from Arthurtown met Dr. Ball on the road one day and told him he was putting him in his sermon. This is part of what the sermon said:

"It came to pass in the year that S. A. Guiden was the pastor of Brown Chapel Church, Arthurs, South Carolina, an angel came unto me and said, Rev., this is Dr. Ball of Richland County. The insanitary condition of your privies has reached the Capitol, and is in violation of S. C. 5041 of the Sanitary Codes of the State. This condition is an abomination in the sight of God. Dr. Ball said unto me, call the people together and let me preach unto them. I said unto all the people both old and young, blind and lame, come and hear the words of the state of South Carolina through Dr. Ball, and he spoke as one having authority.

"Tear down your old privies and build fly proof ones, for flies are man's dedest foes. The people cried out, 'We can't for we are poor.' You can and you must," said the doctor, and this thing pleased the Lord of Host. And it came to pass that everybody is building a sanitary privy in Arthurs, S. C.

"The flyproof privies are an abomination in the sight of the flies. 'Will man destroy us from the face of the earth,' said a fly. All ye inhabitants of the State of South Carolina, be on your guard, for Dr. Ball is on his way."

—Taken from *Georgia Fax*

---

### Train Watchers

While casually perusing the pages of the *Bulletin of the American Medical Writers' Association* we came upon a quatrain:

We watch the trains come in;  
We hear the porters shout;  
And after we watch the trains come in,  
We watch the trains go out.

Having lived in small towns ourself, the lines evoked memories—the local railroad station with its semaphore and worn wooden platform, the station plaza a sea of yellow mud in springtime deep-rutted from the wheels of carriages, the mournful whistle of the westbound express, the panting, smoke-belching impatience of the twice a day local and the self-appointed delegation of train watchers.

This delegation was self-perpetuating, mostly unshaven, casually attired according to the season of the year, and recruited from the ranks of the voluntarily unemployed, a group composing the local philosophical society. This society or perhaps more accurately, association, maintained a headquarters of sorts in a public house on the station plaza where warmth, entertainment for man and beast, liberty, equality, and fraternity were enjoyed between the scheduled arrival and departure of trains and/or the unscheduled appearance of the "black maria" in the interests of public tranquillity and order.

Some ten minutes before train time the remaining



when psychic  
symptoms  
distort the picture

**Dartal helps the patient reintegrate his mental processes**

In everyday office practice as well as under hospital conditions Dartal is consistent in its effects as few tranquilizers are.

**Dartal promotes emotional balance**

Dartal effectively decreases or relieves emotional hyperactivity and psychomotor excitement.

**Dartal is unusually safe**

At a recent symposium, leading hepatologists\* concluded that Dartal is not icterogenic or hepatotoxic.

**Dartal is effective at low dosage**

One 2-mg. tablet q.i.d. or one 5-mg. tablet t.i.d. in neuroses; one 10-mg. tablet t.i.d. in psychoses.

*a superior psychochemical  
for the management of both major and  
minor emotional disturbances*

**Dartal**<sup>®</sup>  
dihydrochloride      brand of thiopropazate dihydrochloride

**SEARLE**

\*A Symposium on the Pharmacologic Effects of Dartal on the Liver, Chicago, Searle Research Laboratories, Feb. 7, 1958.



members of the association would migrate to the depot platform to supervise the placement by the station agent of the baggage, express, and mail truck in its place on the platform. This supervision was done by placing the back against the baggage room wall, assuming a relaxed pose, shifting a quid of fine cut or plug from one cheek to the other, and observing outgoing passengers speculatively while whittling small shavings from a piece of soft wood broken from a crate.

This colorful occupation of train watching had its irresistible allure for the young. The raising of the semaphore arm to the horizontal or stop position, the exodus of the philosophers from the public house, the procession to the platform, the arrival by carriage or on foot of departing passengers twice daily, the engine whistle, its clanging bell and clanking driving rods, were soul-satisfying in an era of little recreation for the young and no movies.

Then, too, the tobacco chewing of the train-watching philosophers was fascinating. It had been developed to the status of an art. Cigar smoking was the prerogative of the filthy rich. Their Havanas reportedly scented the air of such fabulous establishments as Delmonico's or Sherry's in New York City, a locale said to combine the worst features of Sodom and Gomorrah. Cigarets—remember Sweet Caporals with the actresses' pictures?—even if you roll your own were not then considered carcinogenic but allegedly diagnostic of homosexuality or worse.

The technic and art of chewing cutplug or "fine cut" went with the occupation of train watching like ham and eggs. First experiments were discouraging but definitely wicked; forbidden and therefore alluring, a challenge. Some sage once said that the descent to hell is easy. He never chewed tobacco or aspired to be a proper train watcher. But once the initial difficulty is overcome, more or less in private, a second takes its place—the problem of disposal; for chewing resulted for physiologic reasons in the urgent necessity for the development of an admittedly crude, initially inaccurate but later more precise missile launching technic. This at first was confined to nearby, stationary targets, such as knot holes, but later even included the interception of moving targets.

This self-education in practical ballistics, projection, and elementary meteorology as a corollary to the allegedly time-wasting occupation of train watching came to a sudden, and if memory serves us accurately,

painful end at the insistence of aging, unsympathetic and querulous persons related to us who seemed to feel that attendance upon a more formal system of education was not only desirable but enforceable.

Were these persons right? We now observe formally educated citizens carrying on aloof and aloft with missiles of a far different character. They are so occupied with their highly educated activities that they must take tranquilizers to make their conscious lives endurable or rush off to the moon for a little rest and relaxation. We doubt if many persons now do any train watching. Our simple self-education program in rudimentary missile firing is completely out of date. Eheu, fugaces!

From the *New York State J. Med.* July 1, 1958

*A Clinical and Laboratory Comparison of the Effects of Commonly Used Vasodilator Drugs on Arterial Diseases.* J. Manly Stallworth, M. D., William H. Lee, M. D., Charles Belisle, M. D., and Daniel B. Nunn, M. D., Charleston. *Am. Surgeon.* 24:700, Oct. 1958.

Fifteen patients with representative peripheral vascular disease had detailed laboratory studies made before, during, and after the infusions of four (4) commonly used vasodilators, Arlidin (nylidrin hydrochloride), Priscoline (benzyl-imidazoline hydrochloride), Ilidar (azapetine), Duvadilan (isoxuprine). While none of the drugs showed consistently good results in all types of vascular disease, Ilidar and Priscoline proved most effective in the majority of the patients, especially from the detailed plethysmographic and temperature studies.

There was excellent correlation between the effects of these drugs on the conjunctival vessels and the small vessels in the extremity thus affording an easily accessible source of photographable vessels to be used in the testing of vasodilator groups.

Ilidar and Priscoline produced dilatory effect predominantly on the skin, and on the digital arteries; thus they offer maximum benefit in patients with Raynaud's-like phenomenon, and minimum benefits in those patients with generalized arteriosclerosis. None of the four drugs produced significant changes in the temperature of the gastrocnemius muscle. The effects of the drugs on patients with Buerger's Disease were in direct proportion to the amount of arterial spasm present.



# The Journal

of the

## South Carolina Medical Association

VOLUME LV

March, 1959

NUMBER 3

## SOME PROBLEMS IN DIABETES MELLITUS

A. GORMAN HILLS, M. D.

In medicine, as doubtless also in life, our successes may themselves be the cause that new problems appear, demanding in their turn a new and different solution. The problems in diabetes mellitus to which my title refers are those arising in connection with two therapeutic successes — insulin and the oral hypoglycemic agents. The discovery of insulin and its development for therapeutic use in diabetes mellitus by Banting and Best 38 years ago must always remain the outstanding accomplishment in man's war against this disease, and indeed for a decade or more it appeared that insulin therapy, especially with the aid of depot preparations, had put an end to the serious consequences of the disease, except insofar as tragic losses of life or health occurred during the at least theoretically avoidable acute complications, ketoacidosis and insulin shock. Today these acute complications are completely overshadowed as a cause of disability and death in diabetes by its chronic complications, especially atheromatous and other disease of the large and small blood vessels. These sequelae generally become fully developed only after many years of diabetes, whereas the disease was not, before the insulin era, very frequently compatible with prolonged survival, so that in this sense we may say that insulin, by allowing the diabetic to survive for many years, has resulted in our

being now presented with a new and major challenge in preventive medicine.

In the past three years there have been developed and tested a number of compounds which are capable, when taken orally, of controlling the hyperglycemia and glycosuria of certain diabetics. The problem presented by these agents is of a rather different kind, and is in a different stage of development, from the problems arising in consequences of the discovery of insulin, and centers, I think, about the questions of how these drugs exert their blood-sugar-lowering action, and of when and to whom they should be administered. I shall consider these questions initially, returning afterwards to the subject of the chronic vascular complications of diabetes.

The oral hypoglycemic compounds which have received most attention, and the only ones available to practitioners, are the aryl sulfonylureas, and I shall therefore confine my discussion of orally active compounds to this group and their close relatives. Figure 1 shows the structural formulas of the two sulfonylureas released so far for general use, tolbutamide and chlorpropamide.\* These compounds have many other relatives which have similar physiologic activity, especially the series produced by slight modifications of the alkyl side-chain. The thiodiazols, which were the compounds originally found to have hypoglycemic activity fifteen years ago by Loubatières<sup>1</sup> are also very close chemical relatives; there is little doubt that all these compounds exert their hypoglycemic effect by

From the Section of Endocrinology and Metabolism, Department of Medicine, University of Miami School of Medicine, and the Combined Diabetic-Endocrine-Metabolic Clinics, Jackson Memorial Hospital, Miami 36, Florida.

(ARYL)	1. THIO-DIAZOLS	(ALKYL)**	Name
			2254RP
	2. SULFO-NYLUREAS		TOLBUTAMIDE
			CHLORPROPAMIDE

\*Methyl group of tolbutamide oxidized in metabolism to carboxyl.  
 \*\*Substitution of other 3- or 4- carbon straight or branched alkyl groups has little effect on activity.

FIGURE 1

similar mechanisms. One additional chemical feature of these drugs is noteworthy: the chlorine atom in chlorpropamide prevents metabolic alteration of the drug in the body, whereas the methyl group in tolbutamide is readily oxidized to a carboxyl group, with resulting loss of activity in the compound.<sup>2</sup>

Dr. William A. Abelow and I have summarized elsewhere our early clinical experience with chlorpropamide, which consisted of observations of 49 diabetic patients treated over a period of two to five months with the drug.<sup>3</sup> As far as the type of patient who will respond to oral therapy is concerned, chlorpropamide and tolbutamide appear to behave very similarly. The principal clinical difference between the two compounds stems from the fact that chlorpropamide is not degraded in the body, but is eliminated only by excretion unchanged in the urine; as a result, administered chlorpropamide has a much longer biological half-life than tolbutamide. This means that the duration of effectiveness of a single dose is much greater, and that the maintenance dose of chlorpropamide for attaining effective blood levels of drug is only about one-fifth that of tolbutamide. When therapy is instituted at the maintenance level, five days may be required for full effectiveness to become manifest in terms of blood and urine sugar levels, so that insulin, if being

given, should be gradually withdrawn as the drug is started; similarly, escape from control on chlorpropamide is often delayed for as much as a week after stopping therapy. This slower turnover has the disadvantage that when toxicity develops it will take longer to rid the body of the drug, but on the other hand permits once daily or even once every other day scheduling of medication. For maintenance, 200 mgm. of chlorpropamide or 1 Gm. of tolbutamide are comparable and represent average effective doses for patients who will respond to the drugs; in our opinion 2 to 2½ times these quantities should be the maximum prescribed.

It is important to establish the mechanism of action of a drug offering promise of providing an oral substitute for insulin under certain circumstances in diabetes; for mere lowering of the blood sugar is not necessarily beneficial in itself. Hypoglycemia can result from toxic effects upon the liver or upon those endocrine organs which secrete hormones tending to raise the blood sugar, and such effects might be far from beneficial, even though hyperglycemia is reduced. For this reason, there has been intensive investigation of the pharmacology of the sulfonylureas during the past three years. I believe that, as a result, it is now established that these drugs exert their effects principally by stimulating the secretion of insulin by the beta cells of the pancreatic islets.

In order to consider the clinical evidence, it will be necessary to recall that diabetes mellitus commonly occurs in man in two different forms.<sup>4</sup> Generally speaking, we may say that in the less common variety, principally developing in children and in young adults, the disease begins abruptly with the classical manifestations of increased fluid exchange, increased food intake, and weight loss; insulin is required in substantial amounts at all times to prevent ketosis; and the patient is "insulin-sensitive" and hard to regulate closely without precipitating insulin reactions. The more common type of the disease begins insidiously later in life; diagnosis is often delayed or made incidentally, owing to the relative mildness of the metabolic disorder; stable regulation with insulin is much more readily obtainable; and ketosis generally does not result from mere



withdrawal of insulin, though it is precipitated by infections and stresses. The clinical evidence suggests that the severe juvenile type represents virtually total loss of function of the pancreatic beta cells, whereas in the maturity-onset type of diabetes the beta cells, though functionally impaired, still retain considerable power to elaborate insulin; and this supposition has received strong experimental support, especially in the demonstration by Wrenshall and his collaborators<sup>5</sup> that extractable insulin is regularly absent from the pancreas in juvenile diabetes, but commonly present in diabetes of the maturity-onset type.

It is a striking clinical fact concerning the sulfonylureas, quite generally agreed upon by all who have studied these drugs, that they are without effect in the severe form of the disease which occurs in children and young adults, whereas they are effective in most cases of maturity-onset diabetes.<sup>6, 7</sup> Experimental evidence parallels this clinical consensus: the drugs will not lower the blood sugar of totally depancreatized animals, nor in *severe* alloxan diabetes;<sup>8, 9</sup> and they seem also not to be effective in depancreatized man.<sup>10</sup> From these facts we must conclude one of two things: either the drugs are beta-cytotropic, that is, they stimulate the secretion of insulin by the pancreatic beta cells, or else they require the presence of at least some amount of insulin in order to exert their hypoglycemic effects. It is true that a claim was made of histologic evidence that these drugs damaged the alpha cells of the pancreas, and it was suggested that they might prevent the secretion of glucagon, which is a blood-sugar-raising factor thought to be secreted by the alpha cells.<sup>11, 12</sup> This evidence, however, was not confirmed by the investigators,<sup>13, 14, 15</sup> and we do not know that glucagon secretion plays any physiologic role in maintenance of the blood sugar; as a result, the alpha cell hypothesis has been discarded.

The question whether the sulfonylureas stimulate the secretion of insulin or whether they merely require the presence of insulin in order to be active should be readily answered by determining whether the provision of insulin by injection renders the depancreatized animal or the severe childhood diabetic susceptible to the hypoglycemic effect of sulfo-

nylureas. Although some effect of the drugs has several times been reported under these circumstances,<sup>16, 17</sup> it has generally been found by investigators of the subject that in both man and animals the presence of a physiological quantity of insulin does *not* permit the sulfonylureas to exert their hypoglycemic action.<sup>6, 7</sup> Thus it is almost impossible to avoid the conclusion that the principal activity of these compounds is the stimulation of insulin secretion by the pancreas. It should be noticed that this evidence is incompatible also with the hypothesis originally put forward by Mirsky and his associates<sup>18</sup> that the sulfonylureas increase the effectiveness of circulating insulin by preventing its breakdown by insulinase, the insulin-degrading enzyme or enzymes of the tissues. Other workers have also been unable to demonstrate that the sulfonylureas have any effect upon the rate of degradation of insulin labelled with radioactive iodine.<sup>19</sup>

Evidence obtained in other ways supports the belief that the sulfonylureas stimulate the secretion of insulin. Dulin and Johnson<sup>20</sup> have observed that the hypoglycemic action of these compounds is demonstrable in the hepatectomized animal, but not in the eviscerated animal in which the pancreas has also been removed. This work was instructive inasmuch as there was considerable evidence that these drugs affected the production of glucose by the liver, and these data had given rise to the belief that the sulfonylureas primarily affected the liver rather than the beta cells. Direct injection of the drugs into the vessels supplying the pancreas also appears to enhance the hypoglycemic effect of sulfonylureas,<sup>21</sup> and there is histologic evidence strongly suggestive of stimulation of the beta cells and, in rats, increase in their number under the influence of the sulfonylureas.<sup>9</sup>

There has been in the past much more reluctance to accept the beta-cytotropic action of the sulfonylureas than there is at the present time; this reluctance stemmed principally from two well-established and related kinds of evidence. On the one hand, the drugs were found beyond question to diminish hepatic glucose production in man<sup>22-24</sup> and animals<sup>23, 25</sup> while on the other hand it has been generally difficult or impossible to demonstrate

with them certain effects in the periphery indicative of accelerated glucose utilization which can generally be produced when insulin is injected into man or animal, namely increased difference between the concentrations of glucose in the artery and vein of an extremity<sup>23</sup> and increase in the concentration of pyruvate and lactate in the plasma.<sup>23</sup>

However, Butterfield, Fry and Holling<sup>26</sup> have emphasized the lack of validity of arteriovenous glucose concentration differences alone as a measure of abstraction of glucose from the blood stream by peripheral tissues. These investigators, combining such measurements in the arm of human subjects with simultaneous estimations of blood flow through the arm, concluded that the effect of the sulfonylureas is similar to that of insulin, in that both compounds lower the "threshold" arterial concentration at which glucose leaves the blood stream. Moreover, the sulfonylureas might act by stimulating insulin secretion yet not yield all effects demonstrable after peripheral injection of insulin. Madison and Unger<sup>27</sup> have recently compared the effects of 0.07 units of insulin injected into the portal vein of dogs with those obtained when the same amount of insulin is given into a peripheral vein. They have shown that while the blood-sugar-lowering effect is the same by both routes, the peripheral effect, as judged by arteriovenous sugar concentration difference, was less when the hormone is given into the portal vein. Their data imply that when insulin is administered in relatively small quantity in such a way as to simulate the conditions under which insulin is secreted by the pancreas, that is, so as to traverse the liver before reaching the general circulation, then a larger part of its hypoglycemic effect is ascribable to suppression of hepatic glucose output, and less to increased peripheral utilization of glucose. It follows that failure to duplicate with sulfonylureas the peripheral effects obtainable by injecting insulin peripherally does not contravene the view that the principal effect of the sulfonylureas is to stimulate secretion of insulin by the beta cells.

Of course modifications of our present concepts of the mode of action of the sulfonylureas may still take place; for example, it

is possible that additional effects on the liver or other organs, or modifications in the susceptibility of the liver to insulin effects, may be demonstrable with these drugs, but I think we can take it for granted that the beta-cytotropic effect of these drugs is now firmly established as the principal cause of their hypoglycemic activity.

This is of course a reassuring conclusion as far as the long-term utility of these compounds is concerned, for it means that their hypoglycemic effect is truly a corrective for the disturbances of physiology of the diabetic state, and not a non-specific and possibly essentially toxic action. Toxic side-effects, however, occur undeniably, and as a group these compounds seem to be capable of damaging seriously and even fatally the bone marrow and the liver; we regard any evidence of an effect on these organs, as well as skin rashes, with suspicion as possible harbingers of serious toxicity, although this is certainly rare with both tolbutamide and chlorpropamide in proper dosage. Chronic side toxicity which might appear after years has also obviously not been ruled out, though it appears less and less likely to prove serious. Finally, the question must arise whether the stimulating effect of these drugs on insulin secretion is necessarily beneficial in the long run. Is it possible that this stimulation may ultimately tend to lead to complete exhaustion of the islet cells and a consequent conversion of stable diabetes into brittle diabetes? These questions are ones to which we cannot at present give a final answer, but they do not deserve on that account to be put out of mind.

What are the present indications for the use of these drugs? We believe that they should be used in a minority of diabetic patients. They have no place in the treatment of severe and juvenile diabetes, and give really gratifying regulation principally in those diabetics who require 20 units of insulin daily or less, and in them only in the absence of acute complications such as infections, acidosis, or operative procedures or other stresses. Moreover, it is such patients who in many instances can be adequately controlled without insulin or drugs if they will lose their overweight and adhere to a proper dietary regimen, as I shall



shortly emphasize. We do not think it wise to prescribe these drugs in lieu of proper dietary management, or to administer them to patients who have failed to cooperate in this respect, for this is only to abet the understandable inclination of the patient to be satisfied with less than optimal control with these convenient drugs, and therefore to invite the accelerated arrival of the chronic complications of diabetes. This leaves us with a group of patients with the maturity-onset type of disease—probably 20% or less of the total—who in spite of proper dietary management and good cooperation continue to require small amounts of insulin to achieve satisfactory control. It is in these patients that the sulfonylureas appear to be indicated, for here they permit the patient the pleasant alternative of a tablet instead of a daily injection, while often achieving as satisfactory normalization of the metabolism as can be achieved by insulin. There are, however, situations where the oral hypoglycemic agents, even though they may not be indicated according to the criteria above, nevertheless have a place in therapy, and indeed may be a real boon to doctor and patients; such situations arise especially in the case of the very elderly, of persons with poor vision who have no one available at home to administer insulin, and in the case of severe allergy to insulin.

\*\*\*\*\*

I want to return now to a consideration of what will generally be agreed to be the outstanding problem in the management of diabetes mellitus today, namely the high incidence and premature development of atheromatous and other disease of the large and small blood vessels, which kills or maims by impairing especially the function of the heart, the brain, the extremities, the kidneys, and the eyes. The magnitude of the problem is underscored by the fact that vascular disease kills about 60% of all diabetics, twice the proportion of other persons who succumb to these disorders, and by the marked shortening of the life span of persons developing diabetes in childhood.<sup>28</sup>

Strong evidence supports the view that it is the chronic disturbance of fat metabolism characteristic of relative or absolute insulin lack which is principally responsible for the

early development of severe change in the arteries of diabetics. The almost uniform and strikingly premature appearance of vascular disease in early middle life in diabetics who have first manifested their disease in childhood clearly relates the complications to the *duration* of the disease, and therefore can scarcely be accounted for except by regarding the vascular disease as an end-product of the disturbed metabolism; while collateral evidence, both clinical and experimental, leaves little doubt that elevated concentrations of certain fatty materials in the plasma constitute an incitement to the development of atheromatous disease.<sup>29</sup> Although all observers have not agreed, it appears more and more, despite an undoubted variable factor of individual vulnerability of the blood vessels, that the speed and intensity of vascular degeneration in diabetics, atheromatous and non-atheromatous alike, is directly correlated statistically with the degree to which the metabolic disorder has been neglected. But although optimum control can moderate and delay, it cannot obviate the development of vascular disease in the diabetic, for even among the best-controlled and most cooperative patients, the incidence of vascular disease is always higher after 15 or 20 years than among any comparable control group of non-diabetics.

I take it that this unfortunate fact results from the circumstances that it is quite impossible, even with the closest regulation which is at all practical, to afford more than a crude approximation, by periodic insulin injections in the diabetic, of the marvellously sensitive control of intermediary metabolism which is achieved by the pancreatic islets in their normal functioning. Delicately responsive to small changes in the blood sugar concentration, they function, in collaboration with other endocrine organs, to maintain a remarkable stability of the blood sugar level. We see this demonstrated over and over again in the glucose tolerance curves of normal persons, where ingestion within 15 minutes of a third or so of the total daily carbohydrate ration results in only moderate and very transient elevation above normal of the blood glucose concentration. I am sure that no diabetic requiring insulin has a 24-hour blood sugar curve as stable



as a normal person's; indeed spillage of no more than a trace of glucose once or twice during the day, which implies that blood sugars at least as high as the maximum elevation of a normal tolerance curve are occurring several times daily, would surely be considered highly satisfactory control in many diabetics. Yet whenever the blood sugar goes up even to this extent because of insulin lack, fat metabolism is disturbed. Serum triglycerides, non-esterified fatty acids, cholesterol and phospholipids are all increased in concentration in the plasma of poorly regulated diabetics,<sup>30</sup> and it appears that even quite temporary periods of insulin lack which result in transient hyperglycemia result also in a rise in the concentration of triglycerides<sup>30</sup> and non-esterified fatty acids<sup>31</sup> in the plasma. I do not think that refinement of dietary management or the development of any new types of insulin preparations can be expected to place in our hands the means of really achieving in the diabetic the degree of stability of blood sugar concentration and the attendant moderation of blood fat concentrations enjoyed by persons with intact islet cells.

In view of these considerations I doubt that in treating patients with established diabetes mellitus by intermittent injections of insulin we can hope to be wholly successful in eliminating the vascular complications in the most cooperative group of patients, and we will certainly be less successful in the less cooperative patients. It would seem that the only way we could eliminate these complications entirely would be to preserve adequate function and normal responsiveness of the pancreatic islet cells themselves—in other words, to prevent the development of diabetes. Certainly it would be immensely worthwhile if this could be accomplished in even a small percentage of patients.

I propose now to present a few selected observations exemplifying certain aspects of the natural history of diabetes mellitus which seem to raise the question whether we might not indeed be able to preserve islet cell function in certain patients, and so to attack the problem of vascular disease at its root. The patients to be presented have been observed by Dr. Janice Burr and myself in our clinic, and each

is representative of a group of patients in the literature and in our material. Let me hasten to say that we have no answers to the principal questions which will be raised; but we do think that the answers are obtainable, and the questions of importance.

From the standpoint of the natural history of the disease, the maturity-onset type of diabetes is more interesting than the juvenile type. In the juvenile type, the metabolic fault develops rapidly and remissions rarely occur, so that essentially the natural history of this type of diabetes consists of the progressive development of the complications of the disease, with little change in the severity of the metabolic abnormality itself, except when severe nephropathy develops. A different story often unfolds in maturity-onset diabetes. It has been recognized for many years<sup>4, 32</sup> that the newly diagnosed, obese, middle-aged diabetic who will consent to have his weight reduced toward normal by caloric restriction will often be rewarded by diminution and disappearance of glycosuria, and may attain perfectly normal fasting blood sugars, and even normal glucose tolerance, by this means. Conversely, intercurrent infection or gain in body weight will rather regularly cause metabolic relapse.

A striking example of the benefit of reduction of overweight is afforded by the case of Mrs. F. P., a colored woman who was admitted to the Gynecology Service of Jackson Memorial Hospital in 1955 at the age of 60 years for a hysterectomy because of uterine myomata. At this time she was markedly obese, measuring 66 inches in height and weighing 242 pounds. The fasting blood sugar was 390 mg./100 ml. and the urine contained sugar and a trace of acetone; there was no acidosis. A diagnosis of diabetes mellitus was made, and the patient received insulin in doses ranging from 30 to 90 units daily throughout her hospital stay of 17 days, in spite of which constant glycosuria and intermittent mild acetonuria were present. Hysterectomy was performed on the sixth hospital day.

She was discharged on September 23, 1955 and thereafter followed in the Diabetic Clinic where she was given a low-calorie diabetic diet and 20 units of NPH insulin daily. At the end of one month her weight had been reduced from 242 to 234 pounds and in December 1955, at the end of three months, to 214 pounds. The dose of insulin was gradually reduced, and at the end of two months it was possible to discontinue insulin entirely. One urine specimen collected in the Clinic during December contained a trace of glucose, but after February 1956 there was no glyco-

suria and fasting blood sugars and two-hour post-prandial blood sugars were repeatedly normal. There was slight elevation of the two-hour value of the glucose tolerance curve in December 1956, but one month later the entire curve was within normal limits, and remained so in September 1957 and March 1958; during this period her weight remained between 210 and 214 pounds (Figure 2). This, then, is a case of complete disappearance of the manifestations of diabetes mellitus over a three-month period coincident with reduction of 30 pounds of overweight, with a subsequent 2½ year follow-up period during which the glucose tolerance has remained completely unimpaired.

To my mind, this case history exemplifies an instance in which the accelerated vascular disease of diabetes is being wholly prevented, at least for the time. If we believe that the vascular complications result from the metabolic disorder, then I think we must believe that a

persistantly normal glucose tolerance implies that the abnormal processes leading to the vascular complications have been wholly rectified; and if the normal tolerance can be maintained indefinitely, then the premature development of the complications can be indefinitely delayed. Not all newly diagnosed obese diabetics will have so gratifying a response to weight loss as this patient; but the case shows what can be accomplished in some instances, and underscores the importance of weight reduction in all obese diabetics.

What is the physiological explanation for this remarkable improvement? I find it impossible to imagine any plausible way in which weight loss could cause an increase in insulin secretion by the islet cells. On the other hand, there is every reason to suppose that the

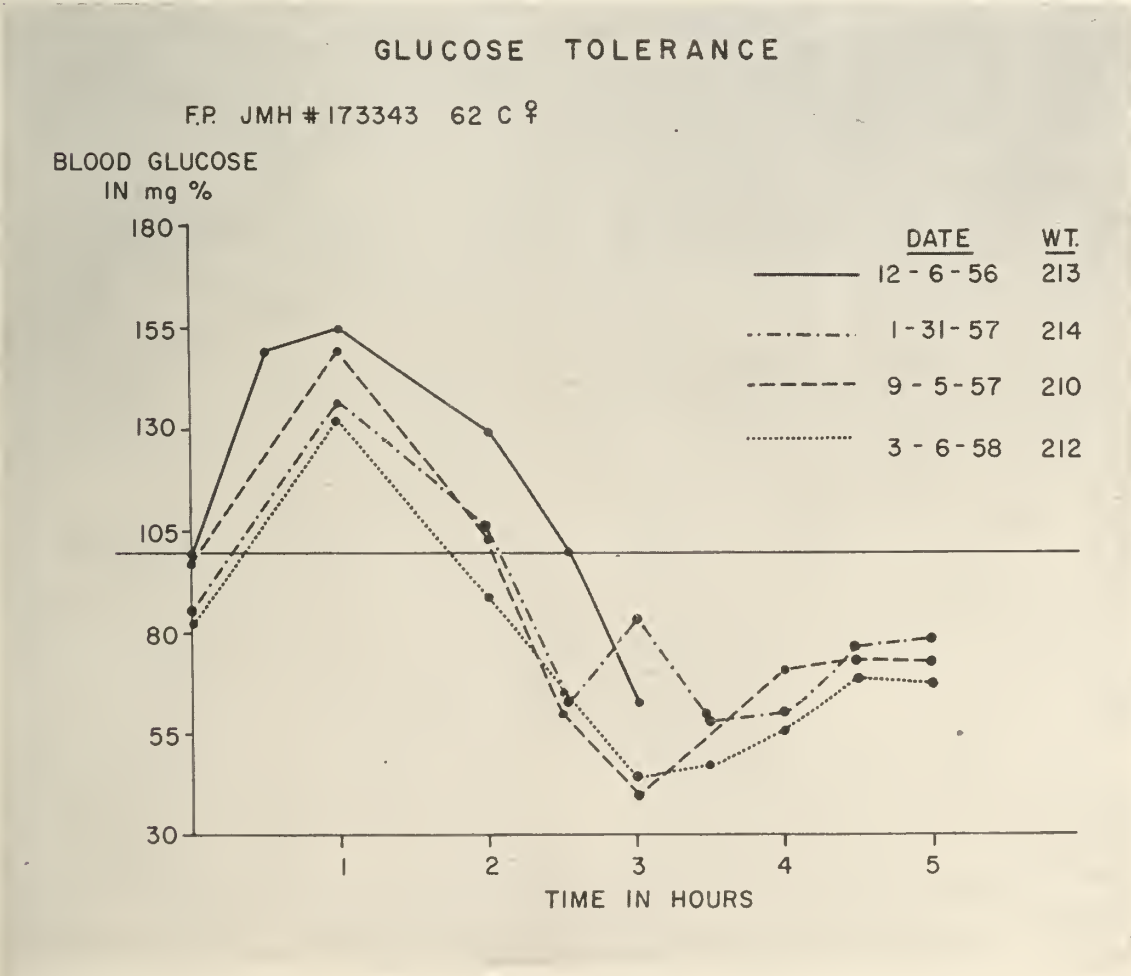


FIGURE 2

weight loss has diminished the need of the organism for insulin, so that the amount of insulin the islet cells are capable of secreting has become adequate to prevent diabetes, whereas formerly it was inadequate.

Doubtless there are a number of reasons why reduction of overweight reduces the requirement for insulin. A patient on a weight-reducing dietary regimen is on the equivalent of a high-fat diet, since a considerable portion of his caloric requirement comes from the oxidation of his own body fat stores; and there is evidence that the amount of insulin required and secreted is less on a high-fat diet than on an isocaloric high-fat diet: the tolerance to carbohydrate is impaired by prior fasting or consumption of a high-fat diet, and restored by carbohydrate feeding,<sup>33, 34</sup> while carbohydrate feeding stimulates insulin secretion.<sup>35, 36</sup> One may also suppose that in a person on caloric restriction the degree of ebb and flow of catabolism and anabolism in relation to the taking of large meals is much reduced, and that the outstanding direction of metabolic traffic throughout the day and night is the oxidation of fats; whereas we know from the work of Drury,<sup>37</sup> of Stetten and his collaborators,<sup>38-40</sup> and of Gurin and Brady,<sup>41</sup> that one of the principal functions for which insulin is required is the anabolic one of the synthesis of fat from carbohydrate. However, our patient shows that maximum long-term benefit, that is, accurate metabolic regulation by endogenous insulin secretion, may accrue for a period of years after therapeutic weight loss has been completed, that is, after the above considerations have ceased to apply; what is the explanation of the patient's continued metabolic normality?

Certainly total metabolism must be reduced when a 15% weight reduction is accomplished, and so the amount of work required of all the organs and tissues is presumably also reduced; but whether such marked improvement in islet function can be accounted for in this way may be open to question. Perhaps we should consider the possibility that reduction during the period of active weight loss of secretory demands on the pancreatic islets which had been in excess of their capacity was sufficient to permit the failing beta cells to recuperate to the

point of acquiring considerable reserve. The next case to be presented raises this question more insistently.

Mrs. G. K. is a colored female who was 45 years old when first admitted to Jackson Memorial Hospital in May 1951 because of cellulitis of the vulva. On admission she was found to have more than 2% sugar in the urine, the fasting blood sugar was 264 mg./100 ml., the serum carbon dioxide content was 16 mEq./L., and the urine gave a 2+ test for acetone. The patient was given appropriate and successful treatment for her cellulitis, and received throughout her six-day hospital stay crystalline and long-acting insulin in an average total daily dose of 40 units, but in spite of this her urine continued to contain 0.2 to 1% of glucose throughout her hospital stay and gave a 1 to 3+ test for acetone for the first three days. After discharge, the patient was followed in the Diabetic Clinic and continued to take insulin in the form of protamine zinc insulin in amounts varying between 10 and 20 units daily. Her weight at the time of her initial hospital admission was 160 pounds and the variation in weight observed over the ensuing seven years was small, ranging between the extreme limits of 156 and 172 pounds. Until August 1952, the patient had a number of operative procedures including several revisions of a long-standing colostomy; since that time, however, her general health has been good. The patient tested her own urine regularly, and reported that small to moderate amounts of glucose were constantly present. However, the fasting blood sugar was determined on several occasions in early 1956 and found to be entirely normal, and the urine as tested in the Clinic in early 1956 was also consistently negative for glucose. For these reasons all insulin was discontinued in May 1956, and the patient has received no further insulin since that time. Throughout the remainder of 1956 and the first three-quarters of 1957 the patient exhibited mildly diabetic glucose tolerance curves, but in February 1958 and again in August 1958 the tolerance curves showed no impairment whatever of glucose tolerance (Figure 3). The patient has been free of overt intercurrent infections or other clinical stresses from 1953 on.

Here, then, is an instance of full-blown diabetes mellitus with ketonuria and mild acidosis developing in a setting of intercurrent infection, with impairment of glucose tolerance persisting for a period of fully six years thereafter, with subsequent complete disappearance of all manifestations of diabetes mellitus including impairment of glucose tolerance, the late normalization of the tolerance curve being completely inexplicable in terms of weight loss or the correction of prior infection. Similar cases have been reported by others.<sup>42, 43</sup>

Here again we seem to be dealing with pan-



## GLUCOSE TOLERANCE

G.K. JMH # 167114 52 C ♀

BLOOD GLUCOSE

IN mg. %

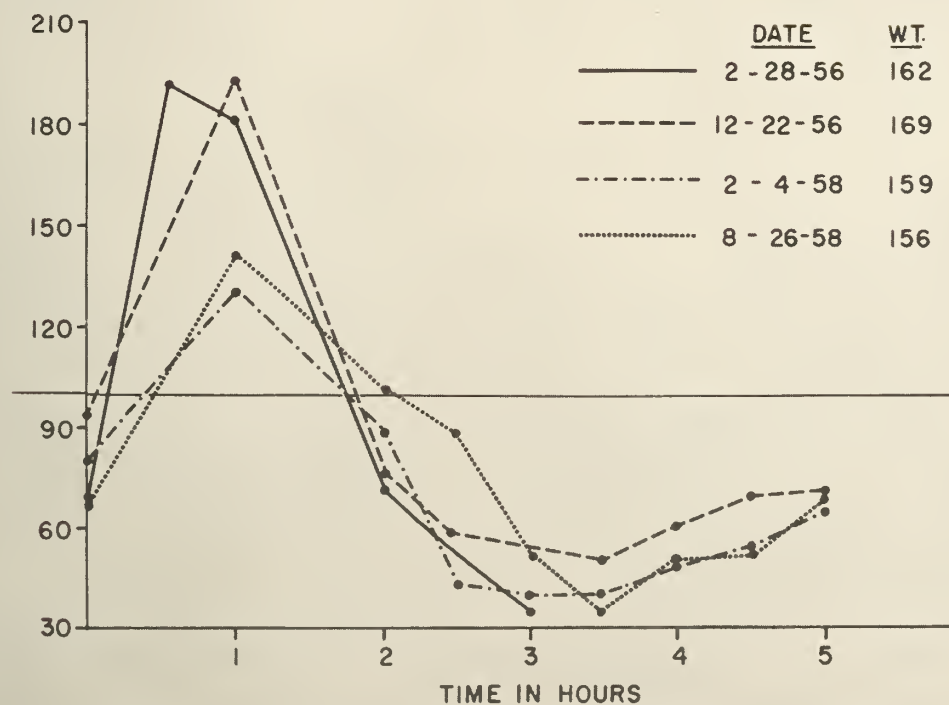


FIGURE 3

creatic islets of borderline reserve power. The initial episode of frank diabetes mellitus represented inability of the islets to provide enough insulin under circumstances of markedly increased insulin requirement; and after that episode of frank decompensation, it was possible to show by the glucose tolerance test that the islets had very little reserve for a period of six years. Yet ultimately, their functional capacity did improve to the point where we can no longer show evidence of limited reserve by means of the glucose tolerance test. Why did the islet cells recover in this way? I should like to suggest that the provision of insulin throughout five years of mild to subclinical diabetes might, by diminishing the requirement for endogenous insulin secretion, have permitted the islet cells to rest and recover some reserve function.

The possibility that insulin administration might under certain circumstances permit recovery of islet cell function in clinical diabetes is quite strongly suggested by data obtained by many investigators in the study of experimental diabetes in animals. Let us recall the circumstances of the production of so-called metahypophyseal diabetes, first accomplished by Young.<sup>44</sup> If a normal dog is given repeated injections of purified growth hormone (the demonstration was originally made with certain anterior pituitary extracts) hyperglycemia and glycosuria occur which can be ascribed to the direct effect of growth hormone itself on intermediary metabolism, principally to inhibition of glucose utilization. During the initial period of these injections, the output of insulin by the pancreas is increased four-fold, as shown by other experiments in diabetic

dogs maintained on exogenous insulin in various amounts during the injection of the growth hormone. At the same time hydropic degeneration of the islet cells appears, indicative of secretory overwork. If the injections of growth hormone are discontinued soon enough, the diabetic state is entirely reversible; but continued administration of the injections ultimately results in the development of diabetes which persists indefinitely after the injections are discontinued. At this time the islets of Langerhans are reduced in size and number, the beta cells are degenerated, the pancreas contains only traces of extractable insulin, and its capacity to secrete insulin is apparently greatly diminished or lost.

There are marked differences in the vulnerability to growth hormone injections of the islets of different animal species, but in general this variation only emphasizes that the production of *permanent* diabetes by the administration of growth hormone results from exhaustion of the islet cells. Rats, for example, are strikingly resistant to the production of metahypophyseal diabetes, and in this species the islets proliferate during growth hormone administration, and the extractable insulin content of the pancreas increases; apparently permanent diabetes is not produced in this species because the latent secretory capacity of the islets cannot be exceeded by this means.<sup>45</sup> There is also little doubt that the permanent diabetes which can be produced in rats by continued administration of adrenal cortical hormones, and which, as Buse and his colleagues succeeded in showing, can also be produced in cats,<sup>46</sup> is ascribable to exhaustion of the secretory capacity of the islets through overwork.

I do not, of course, mean to imply that the development of most cases of diabetes is at all related to excessive activity of other endocrine glands; cases of diabetes of this kind do occur clinically, but they are not the common type of diabetes mellitus. On the contrary, I should assume that in a patient such as the one whose case has just been presented, the primary fault is in the pancreas, the total functional capacity of the beta cells being originally low, presumably on a constitutional and genetic basis. However, it is quite certain that hyperglycemia

is itself a potent stimulus to insulin secretion<sup>35, 47</sup>; and Dohan and Lukens<sup>36</sup> have demonstrated that maintenance in cats of chronic hyperglycemia by means of repeated injections of glucose will ultimately result in permanent diabetes mellitus with histologic evidence of severe damage to the beta cells. We can easily suppose that when a person with constitutional low islet cell reserve develops weight gain or an infection or stress which raises the insulin requirement sufficiently to exceed his islet cell reserve, the consequent hyperglycemia, abetted usually by the development of insulin resistance, constitutes a constant secretory stimulus during that period intense enough to cause further damage to the pancreas with increased impairment of islet function, so that diabetes continues after the stress is relieved.

From the point of view of our present considerations, experiments of particular interest are those of Lukens and his collaborators<sup>48, 49</sup> who were able to show that the metahypophyseal diabetes of cats is not necessarily permanent, and that recovery from this condition can be accomplished by the administration of insulin (or other measures which lower the blood sugar) or by reducing the caloric intake, but only if the therapy is instituted within three months. What I am suggesting is that the two cases presented today might constitute the clinical counterparts of these experimental demonstrations of the reversibility of pancreatic diabetes.

I should not like to push this suggestion too far. In spite of the fact that there is good evidence that most patients with chronic diabetes of the maturity-onset type do retain some capacity to secrete insulin, treatment with insulin in these patients seldom results in eventual disappearance of their requirement for exogenous insulin. It is clear enough, therefore, that the mere preservation of some capacity by human beta cells to secrete insulin does not imply their potentiality to recover normal secretory capacity and responsiveness. But it is undeniable that in certain patients with still less impairment of islet cell functional capacity—those in whom the impairment of carbohydrate tolerance is mild, or in whom frank diabetes has developed only recently, under

the provocation of weight gain, infection, or stress — normal islet cell responsiveness may certainly be regained and persist for indefinite periods of time under circumstances suggesting that resting the beta cells, by weight reduction (where indicated) or by administration of small amounts of insulin for varying periods of time, may be responsible.

The clinical evidence seems to indicate quite clearly that (as in the case of the experimental animals) the diabetic patients whose glucose tolerance curve may be made to revert to normal are in general those who have early pancreatic islet insufficiency and, except where stress precipitates frank diabetes, very mild disturbance of the metabolism. Assuming that there are at large a considerable number of persons who theoretically might have their impaired tolerance curves restored to normal by suitable management, it unfortunately still remains true that in many such persons the metabolic abnormality is so mild that it probably will not come to light at that early stage where there exists the best chance for restoration of normal tolerance. Diabetes is all too commonly first diagnosed in a middle-aged or elderly patient only after the vascular complications have already appeared;<sup>50</sup> indeed these may first permit the diagnosis to be made, as happens not uncommonly in the case of diabetic retinopathy. Thus it seems probable that if we are to hope to see a course of events like that in our second patient exemplified in any considerable number of patients, it will be necessary to identify patients having low borderline islet reserve before overt manifestations of diabetes mellitus have appeared.

The questions raised by these considerations seem to me to be the following ones: (1) How many persons are there at large in the country at this moment who have undisclosed borderline islet cell reserve or mild impairment of glucose tolerance? (2) What are the practical ways of identifying these persons? (3) Of this group, what proportion will respond to preventive measures by a restoration of normal glucose tolerance, as compared with similar untreated subjects, and in what proportion of them will the glucose tolerance remain normal indefinitely? (4) Can additional measures be developed to preserve islet cell function?

A good deal of information relative to the first two questions is available. A great many physicians, as well as public health agencies, have interested themselves in diabetes detection, and from their data we can be very sure that undetected borderline abnormality of carbohydrate metabolism is very common indeed. Conn, for example,<sup>51</sup> has reported that 20% of persons who have a relative with known diabetes are found when tested to have impaired glucose tolerance, which means that a mass screening program to detect early impairment of carbohydrate tolerance among relatives of known diabetics would be unusually efficient as a method for the detection of possibly preventable disease. Since we know that diabetes does sometimes develop in persons without a family history of the disease, there must be additional persons who in fact have undetected impairment of glucose tolerance, but we cannot say how many such persons there are.

We have already begun to consider the second question, namely how best to discover early pancreatic islet strain. Conn<sup>51</sup> has recently considered the subject under the title "The Prediabetic State In Man", and takes the position, to which we subscribe, that no meaningful line of distinction can be drawn, as far as pathogenesis is concerned, between overt and continued glycosuria on the one hand, and impairment of the standard glucose tolerance test, as well as certain other manifestations which we can recognize as "prediabetic". One such manifestation of especial interest, in that it takes us back earlier than any other clinical finding into the life history of pancreatic islet insufficiency, is the occurrence of large babies in the patient's history or in the family, unexplained maternal and fetal disorders in the obstetrical history, and the development of temporarily impaired glucose tolerance during the course of successive pregnancies. It has been realized for many years<sup>52-54</sup> that diabetes ultimately may be expected to develop in such women, though the glucose tolerance may repeatedly be restored to normal following the pregnancies. Such patients, who can be detected by routine glucose tolerance tests during pregnancy or early in the puerperium, constitute a well-de-



finer group of early prediabetics in whom one could evaluate, by follow-up with adequate controls, the effectiveness of measures designed to protect the pancreas.

Another clinical manifestation which may lead to the suspicion of impending failure of islet cell function is the appearance of hypoglycemic symptoms resembling those of functional hypoglycemia. The history of Mrs. E. A., a patient of our Clinic, may serve as an illustration.

The patient was a white woman first seen in our Diabetic Clinic in November 1957 at the age of 55, having been referred from Arthritis Clinic because of a history of diabetes mellitus. The diagnosis of diabetes was made in another city in September 1956 on the basis of glycosuria and hyperglycemia. The patient was given a prescription for a low calorie diabetic diet, to which she adhered, and she had lost 30 pounds over the ensuing year. She had received some cortisone therapy because of rheumatoid arthritis, but only during the two months of August and September of 1957.

When first seen in the Clinic she was a slender, 93 pound woman with no family history of diabetes. Her principal complaints had been weakness and headaches coming on at approximately ten o'clock in the morning and again at four o'clock in the afternoon, the complaints being relieved by the next meal. A glucose tolerance test was performed on November 26, 1957 and repeated on June 5, 1958. These curves were similar and showed impairment of tolerance in the one and two-hour values, whereas abnormally low values (43 and 35 mg/100 ml.) occurred quite late (4 and 4½ hours) (Figure 4); in functional hypoglycemia the hypoglycemic phase occurs earlier.

Hypoglycemic symptoms in persons with glucose tolerance curves of this type have been observed by a number of authors over many years.<sup>55-65</sup> Seltzer, Fajans and Conn<sup>64</sup> interpret this kind of tolerance curve as reflecting a delayed but ultimately quantitatively normal response of the pancreatic islets to the stimulus of rising blood sugar. It is important that half-hour values as well as hour values be obtained after the third hour, and that the test be carried out to five hours, if the existence of this abnormality is not to be overlooked, and, as in all glucose tolerance curves, standard dietary preparation is required. This type of curve has been observed in some instances to progress to frank impairment of tolerance without the late hypoglycemia and on to overt diabetes<sup>64, 66</sup> and it has in fact been sug-

gested<sup>55, 56, 60</sup> that the history often obtained of weight gain prior to the development of overt diabetes may be precipitated by hypoglycemic symptoms much more commonly than is generally supposed. How often patients with hypoglycemic symptoms and tolerance curves of this type become frankly diabetic and whether normal tolerance can often be restored are unanswered and controversial questions; Fabrykant<sup>60, 61, 65</sup> believes that in most instances such curves are not indicative of diabetes mellitus at all, but represent some other condition capable of affecting carbohydrate metabolism. They may certainly be encountered in renal glycosuria, especially after carbohydrate restriction, the early impairment of tolerance being apparently ascribable to the scant representation of dietary carbohydrate in the metabolic mixture.<sup>33, 67</sup>

Finally I should like to draw special attention to a phenomenon which every clinician encounters from time to time, namely the very transient appearance of glycosuria or hyperglycemia during the course of a severe illness, such as myocardial infarction, meningitis or other infections, or in other acute conditions. Not infrequently, such patients are observed after their acute illness to exhibit normal glucose tolerance; often this is considered to exclude diabetes mellitus and the question of insufficiency of the pancreatic islet cells is dismissed. We would hold on the contrary that such persons should be considered possibly or probably prediabetic, and that they should be subjected to the closest scrutiny with periodically repeated glucose tolerance tests for the rest of their lives, for it is precisely in such patients that we may hope, with the aid of such observations, to test and to develop means of preserving islet-cell responsiveness.

There is need for more information concerning the natural history of these mild and early disturbances of carbohydrate metabolism. There seems to have been published only one long-term study of this nature, that of John.<sup>68</sup> From this remarkable report of 55 such patients followed for as long as 25 years, we can be sure that an episode of metabolic decompensation is not necessarily incompatible with many subsequent years of life without overt disorder of carbohydrate

## GLUCOSE TOLERANCE

E.A. JMH # 313006 55 W ♀

BLOOD GLUCOSE

IN mg %

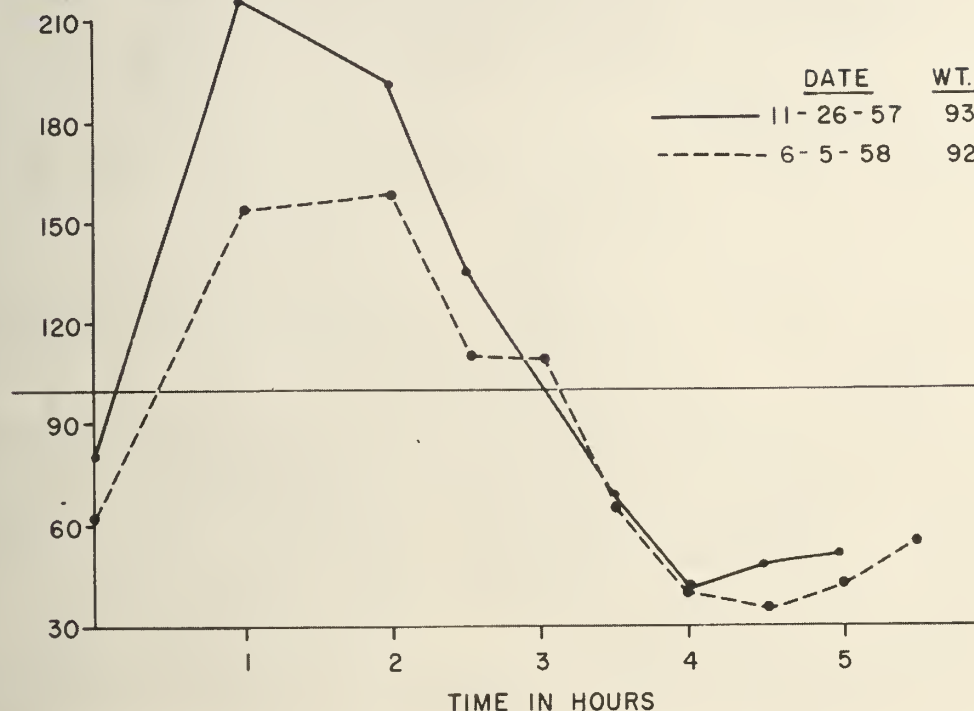


FIGURE 4

metabolism, though 60% of the patients studied did ultimately develop florid diabetes. Additional information is certainly obtainable in such patients by the use of repeated glucose tolerance tests and by special tests such as the cortisone-glucose tolerance test;<sup>51</sup> and long-term and detailed studies of this nature are in progress in at least one group of prediabetic subjects, those showing impaired carbohydrate tolerance during pregnancy.<sup>69</sup> The time would seem ripe also to institute long-term controlled studies of the effectiveness, as diabetes prevention in such subjects, of measures like weight reduction or insulin administration, or of other measures of sparing islet cell function which developments in the future may put into our hands. I am thinking here of the evidence indicating that a variety of agents — growth hormone, prolactin, and ACTH<sup>44</sup> as

well as the aryl sulfonylureas themselves<sup>9</sup> may, under certain conditions, actually stimulate beta cell proliferation in some species. In our Clinic we are interested in trying to determine whether the chronic administration of small quantities of insulin actually can provide a practical means of preserving pancreatic islet function in this group of patients; but we do not have, and will not have for a long time, evidence which will permit us to arrive at an answer to the question. A widespread interest in the prediabetic state will do more than anything else to provide an early answer.

### Summary

One can observe florid diabetes mellitus of recent onset to regress completely on occasion — commonly with reduction of overweight, but sometimes in patients on insulin therapy *not* as a consequence of weight loss or the

elimination of overt infection. The clinical observations suggest that such cases may be the clinical counterpart of the experimental diabetes produced by exhaustion of the islet cells, which has been shown under certain circumstances to be reversible by weight loss and by insulin administration, apparently as a result of "resting" the pancreas. Clinical restoration of normal islet cell responsiveness appears to occur only when islet cell failure is very mild or very early; it is suggested that the detection of such cases, which are numerous, and documentation of their natural history, is an important work in which all physicians can participate. Such cases are to be sought especially among relatives of diabetics, in persons with a personal or family history of large

babies and excessive obstetrical mishaps, in persons showing transient glycosuria or hyperglycemia even though their glucose tolerance subsequently becomes normal, and in persons with symptoms suggestive of functional hypoglycemia. It is suggested that restoration of islet cell responsiveness may offer us our best chance to prevent the vascular complications of diabetes. It is recalled that the problem of the prevention of vascular disease in diabetes has largely arisen out of the great achievement of insulin therapy, and some problems now arising as a result a new therapeutic achievement, the oral hypoglycemic agents, have also been outlined.

\*Tolbutamide is marketed by the Upjohn Company as Orinase®, chlorpropamide by Charles Pfizer and Company as Diabinese®.

#### ACKNOWLEDGMENT

Studies of diabetes mellitus in our Clinic have been supported in part by Graduate Training Grant #2A-5061 of the National Institute of Arthritis and Metabolic Diseases.

#### REFERENCES

1. Loubatières, A. The hypoglycemic sulfonamides: history and development of the problem from 1942 to 1955. *Ann. New York Acad. Sci.* 71:4, 1957.
2. Stowers, J. M., Hunter, R. B., and Constable, L. W. Clinical and pharmacological comparison of chlorpropamide and other sulfonylureas. *Ann. New York Acad. Sci.* (in press).
3. Hills, A. G., and Abelove, W. A. Clinical experience with chlorpropamide in the management of diabetes mellitus. *Ann. New York Acad. Sci.* (in press).
4. Lawrence, R. D. Three types of human diabetes. *Ann. Int. Med.* 43:1199, 1955.
5. Wrenshall, G. A., and Hamilton, J. D. Sex differences in the amount of insulin extractable from diabetic human pancreas. *Ann. New York Acad. Sci.* 71:154, 1957.
6. Levine, R., and Duncan, G. G., Editors. Symposium on clinical and experimental effects of sulfonylureas in diabetes mellitus. *Metabolism* 5:721, 1956.
7. Whitelock, O. v. St., Editor. The effects of sulfonylureas and related compounds in experimental and clinical diabetes. *Ann. New York Acad. Sci.* 71:1, 1957.
8. Baender, A., and Scholz, J. Spezielle pharmakologische Untersuchungen mit D 860. *Deutsche med. Wchnschr.* 82:889, 1956.
9. Loubatières, A. The mechanism of action of the hypoglycemic sulfonamides: a concept based on investigations in animals and in human beings. *Ann. New York Acad. Sci.* 71:192, 1957.
10. Pines, K. The influence of chlorpropamide upon spontaneous and postpancreatectomy diabetes. *Ann. New York Acad. Sci.* (in press).
11. Bertram, F., Bendfeldt, E., and Otto, H. Ueber ein wirksames perorales Antidiabeticum (BZ 55). *Deutsche med. Wchnschr.* 80:1455, 1955.
12. Achelis, J. D., and Hardebeck, K. Ueber eine neue blutzuckersenkende Substanz; vorläufige Mitteilung. *Deutsche med. Wchnschr.* 80:1452, 1955.
13. Creutzfeldt, W., and Tecklenborg, E. Experimentelle Untersuchungen zur Funktion der A-Zellen der Pankreasinseln und zur Glucagonwirkung. *Arch. exper. Path. u. Pharmacol.* 227:23, 1955.
14. Volk, B. W., Weisenfeld, S., Lazarus, S. S., and Goldner, M. G. Mechanisms of action of the hypoglycemia-producing sulfonylurea derivatives. (With some clinical observations). *Metabolism* 5:894, 1956.
15. Volk, B. W., Goldner, M. G., Weisenfeld, S., and Lazarus, S. S. Functional and histological studies concerning the action of sulfonylureas. *Ann. New York Acad. Sci.* 71:141, 1957.
16. Ricketts, H. T., Wildberger, H. L., and Schmid, H. Long-term studies of the sulfonylureas in totally depancreatized dogs. *Ann. New York Acad. Sci.* 71:170, 1957.
17. Houssay, B. A., Penhos, J. C., Urgoiti, E., Teodosio, N., Apfelbaum, J., and Bowkett, J. The role of insulin in the action of the hypoglycemic sulfonyl compounds. *Ann. New York Acad. Sci.* 71:25, 1957.
18. Mirsky, I. A., Perisutti, G., and Diengott, D. The inhibition of insulinase by hypoglycemic sulfonamides. *Metabolism* 5:156, 1956.
19. Wick, A. N., Karasek, M., and Britton, B. The effect of tolbutamide on insulin-<sup>131</sup>I degradation in the extrahepatic tissues. *Ann. New York Acad. Sci.* 71:35, 1957.
20. Dulin, W. E., and Johnston, R. L. Studies concerning the role of the liver in the hypoglycemic response of animals to tolbutamide. *Ann. New York Acad. Sci.* 71:177, 1957.
21. Colwell, A. R., Jr., Colwell, J. A., and Colwell, A. R., Sr. Perfusion studies with sulfonylureas in dogs. *Ann. New York Acad. Sci.* 71:125, 1957.
22. Kibler, R. F., and Gordon, G. Effect of tolyl-sulfonylurea (Orinase) on net splanchnic glucose production in man. *J. Lab. & Clin. Med.* 48:824, 1956.
23. Recant, L., and Fischer, G. L. Studies on the mechanism of tolbutamide hypoglycemia in animal and human subjects. *Ann. New York Acad. Sci.* 71:62, 1957.



24. Elrick, H., and Purnell, R. The response of kidney, liver, and peripheral tissues to tolbutamide and insulin. *Ann. New York Acad. Sci.* 71:38, 1957.
25. Anderson, G. E., Perfetto, A. J., Termine, C. M., and Monaco, R. R. Hypoglycemic action of Orinase. Effect on output of glucose by the liver. *Proc. Soc. Exper. Biol. & Med.* 92:340, 1956.
26. Butterfield, J., Fry, I. K., and Holling, E. Effects of insulin, tolbutamide, and phenethylguanidine on peripheral glucose uptake in man. *Diabetes* 7:449, 1958.
27. Madison, L. L., and Unger, R. H. The physiologic significance of the secretion of endogenous insulin into the portal circulation. I. Comparison of the effects of glucagon-free insulin administered via the portal vein and via a peripheral vein on the magnitude of hypoglycemia and peripheral glucose utilization. *J. Clin. Invest.* 37:631, 1958.
28. Ricketts, H. T. The problem of degenerative vascular disease in diabetes. *Am. J. Med.* 19:933, 1955.
29. Fredrickson, D. S. Atherosclerosis. Chapter 8 of *Metabolic Disturbances in Clinical Medicine*. G. A. Smart, Ed. Boston: Little, Brown and Company, 1958.
30. Albrink, M. J., and Man, E. B. Serum triglycerides in health and diabetes. *Diabetes* 7:194, 1958.
31. Bierman, E. L., Dole, V. P., and Roberts, T. N. An abnormality of nonesterified fatty acid metabolism in diabetes mellitus. *Diabetes* 6:475, 1957.
32. Newburgh, L. H., and Conn, J. W. A New interpretation of hyperglycemia in obese middle-aged persons. *J.A.M.A.* 112:7, 1939.
33. Conn, J. W. Interpretation of the glucose tolerance test; the necessity of a standard preparatory diet. *Am. J. M. Sc.* 199:555, 1940.
34. Sweeney, J. S., Tunnell, J. W., and Tunnell, R. Glucose necessary to simulate insulin production. *Am. J. Clin. Path.* 14:437, 1944.
35. Ricketts, H. T. Carbohydrate tolerance after protamine insulin: its bearing on the physiology of insulin secretion. *J. Clin. Invest.* 17:795, 1938.
36. Dohan, F. C., and Lukens, F. D. W. Experimental diabetes produced by the administration of glucose. *Endocrinology* 42: 244, 1948.
37. Drury, D. R. The role of insulin in carbohydrate metabolism. *Am. J. Physiol.* 131:536, 1940.
38. Stetten, DeW., Jr., and Boxer, G. E. Studies in carbohydrate metabolism; III Metabolic defects in alloxan diabetes. *J. Biol. Chem.* 156:271, 1944.
39. Stetten, DeW., Jr., and Klein, B. V. Studies in carbohydrate metabolism; V Effects of adrenalin and insulin upon glycogenesis in rats. *J. Biol. Chem.* 159:593, 1945.
40. Stetten, DeW., Jr., and Klein, B. V. Studies in carbohydrate metabolism; VI Effects of hypo- and hyperinsulinism in rabbits. *J. Biol. Chem.* 162: 377, 1946.
41. Gurin, S., and Brady, R. O. The *in vitro* synthesis of lipids and its hormonal control. *Recent Progress in Hormone Research* 8:571, 1953.
42. Harwood, R. Severe diabetes with remission. *New England J. Med.* 257:257, 1957.
43. Peck, F. B., Jr., Kirtley, W. R., and Peck, F. B., Sr. Complete remission of severe diabetes. *Diabetes* 7:93, 1958.
44. Young, F. C. The growth hormone and diabetes. *Recent Progress in Hormone Research* 8:471, 1953.
45. Lukens, F. D. W., and Dyer, W. W. The relation between appearance and behavior of the islands of Langerhans in man. *Am. J. Med. Sci.* 231:313, 1956.
46. Buse, J. Gundersen, K., and Lukens, F. D. W. Steroid diabetes in the cat. *Diabetes* 6:428, 1957.
47. Brown, E. M., Jr., Dohan, F. C., Freedman, L. R., De Moor, P., and Lukens, F. D. W. The effects of prolonged infusion of the dog's pancreas with glucose. *Endocrinology* 50:644, 1952.
48. Lukens, F. D. W., and Dohan, F. C. Pituitary-diabetes in the cat; recovery following insulin or dietary treatment. *Endocrinology* 30:175, 1942.
49. Lukens, F. D. W., Dohan, F. C., and Wolcott, M. W. Pituitary-diabetes in the cat; recovery following phlorizin treatment. *Endocrinology* 32: 475, 1943.
50. Bartels, C. C., and Rullo, F. R. Unsuspected diabetes mellitus in peripheral vascular disease. *New England J. Med.* 259:633, 1958.
51. Conn, J. W. The prediabetic state in man. Definition, interpretation and implications. *Diabetes* 7:347, 1958.
52. Skipper, E. Diabetes mellitus and pregnancy; a clinical and analytical study, with special observations upon 33 cases. *Quart. J. Med.* 2:353, 1933.
53. Jackson, W. P. U. Studies in pre-diabetes. *Brit. M. J.* 2:690, 1952.
54. Hoet, J. P. Carbohydrate metabolism during pregnancy. *Diabetes* 3:1, 1954.
55. Harris, S. Hyperinsulinism and dysinsulinism. *J.A.M.A.* 83:729, 1924.
56. Harris, S. Hyperinsulinism and dysinsulinism (insulinogenic hypoglycemia). With a chronological review of cases reported in the United States and Canada. *Internat. Clin.* 42nd Ser. 1:9, 1932.
57. Harris, S. The diagnosis and treatment of hyperinsulinism. *Ann. Int. Med.* 10:514, 1936.
58. Martin, L., and Hellmuth, G. Hypoglycemia. A study of 404 patients who had no insulin and had this common finding. *Am. J. Digest Dis. & Nutrition* 4:579, 1937.
59. Skillern, P. G., and Rynearson, E. H. Medical aspects of hypoglycemia. *J. Clin. Endocrinol.* 13: 587, 1953.
60. Allen, O. P. Symptoms suggesting prodromal stage of diabetes mellitus. *Ohio M. J.* 49:213, 1953.
61. Fabrykant, M. The problem of functional hyperinsulinism or functional hypoglycemia attributed to nervous causes. I. Laboratory and clinical correlations. *Metabolism* 4:469, 1955.
62. Fabrykant, M. The problem of functional hyperinsulinism or functional hypoglycemia attributed to nervous causes. 2. Dietary and neurogenic factors. Diagnostic and therapeutic suggestions. *Metabolism* 4:480, 1955.
63. Smelo, L. A. [Hypoglycemic glucose tolerance curves in diabetes.] *Diabetes* 5:440, 1956.
64. Seltzer, H. S., Fajans, S. S., and Conn, J. W. Spontaneous hypoglycemia as an early manifestation of diabetes mellitus. *Diabetes* 5:437, 1956.
65. Fabrykant, M. [Hypoglycemic glucose tolerance curves in diabetes.] *Diabetes* 6:371, 1957.
66. Bickel, G. Accès d'hypoglycémie convulsive précédant un diabète juvénile grave. *Bull. et mém. Soc. méd. d. hôp. de Paris* 51:7, 1935.
67. Kuhl, W. J., Jr., Miller, H. J., and McMillen, J. A. Diabetic-type glucose tolerance test in a patient with renal glycosuria. *Clinical Research* 6:406, 1958.
68. John, H. J. Prediabetics: What becomes of them? *Am. J. Digest. Dis.* 17:219, 1950.
69. Wilkerson, H. L. C., and Remein, Q. R. Studies of abnormal carbohydrate metabolism in pregnancy. The significance of impaired glucose tolerance. *Diabetes* 6:324, 1957.

# GASTRO-INTESTINAL TRICHOBEZOAR

## REPORT OF A CASE WITH INTESTINAL OBSTRUCTION SECONDARY TO JEJUNAL INTUSSUSCEPTION

WENDELL M. LEVI, JR., M. D.\*  
Charleston, S. C.

### *Introduction*

**T**richobezoars of the gastro-intestinal tract are of sufficient rarity to warrant reporting of all cases, especially those with unusual complications.

Their introduction into the literature at intervals of time serves to both refresh and acquaint the readers with an entity which is easily diagnosed when suspected and readily removed surgically.

This case is that of a trichobezoar of the stomach, duodenum, and jejunum with intestinal obstruction secondary to an intussusception of the jejunum. A review of the literature has failed to reveal other cases of intussusception as a complication of this entity.

### *History*

Baudamant<sup>1</sup> in 1779 reported the first case of gastric hair ball. Schonborn<sup>11</sup> in 1883 presented the first report of a case of trichobezoar that was surgically removed. Extensive reviews of the literature have occurred from time to time. Butterworth<sup>3</sup> in 1909, Matas<sup>9</sup> in 1915, Davies<sup>4</sup> in 1921, Hart<sup>6</sup> in 1923, Maes<sup>8</sup> in 1928, Balfour and Good<sup>2</sup> in 1929, DeBakey and Ochsner<sup>5</sup> in 1939, Mullen<sup>10</sup> in 1957, Hoyt<sup>7</sup> in 1958. DeBakey and Ochsner in 1939 collected 171 cases of trichobezoar. Mullen in 1957 reviewed the literature and added another case and brought the total to 212 cases. Hoyt in 1958 collected 17 additional cases and added one of his own, making a total of 230 cases of trichobezoar of the stomach.

### *Case Report*

A 27 month old colored female admitted because of intermittent abdominal pain for four to six weeks prior to admission. This was associated with anorexia, weight loss of an undetermined amount, and constipation. She gave a history of ingestion of copious amounts of nylon cloth, rags, bristles, doll's hair, and wool rugs since she was able to crawl.

\*Fellow in Surgery, Department of Surgery, Medical College of South Carolina.

cramping abdominal pain associated with nausea and vomiting.

Past history: A full term normal delivery, birth weight 6 pounds, 3 ounces. She walked at 9 months of age. The first teeth were at 7 months. Bladder and bowel control was obtained at 21 months. Her past illnesses included only occasional colds.

She had the onset, the day prior to admission, of

Family history: Mother 21 years old, living and well. Father 25 years old, living and well. One older sibling, age three, a male, in good health. This sibling gave no history of ingesting foreign material.

Physical examination: Temp. 99.8° F. Pulse 94. Respirations 22. The patient was a lethargic, moderately well-developed, and moderately well-nourished, alert colored female who appeared to have some evidence of recent weight loss but otherwise was in no distress. There was a sinus arrhythmia. The abdomen was moderately protuberant, and a firm, slightly movable, non-tender mass was palpable in the mid-epigastrium. Normal active peristalsis was present. The mass appeared to extend transversely across the upper quadrants of the abdomen.

Laboratory work: Hemoglobin 10 Gm. with a red blood count of 4.2 million. White blood count 12,850 with 78% polymorphonuclears, 2% non filamented cells, 20% lymphocytes, and 2% eosinophils. The stool showed 1+ occult blood, and was negative for ova and parasites. No hairs were seen in the stool specimen. Urinalysis was negative. Blood urea nitrogen 12 mg./100 ml. Intravenous pyelograms demonstrated good function bilaterally. Examination of the stomach with barium injected through a naso-gastric tube revealed a large, irregular filling defect in the body of the stomach, which appeared movable but was not miscible with the barium. (Figure #1). A small amount of barium entered the duodenal loop and jejunum where additional filling defects were noted. The defects in the duodenum and jejunum had the same mottled appearance as the mass in the stomach.

Hospital course: Despite naso-gastric suction and intravenous alimentation, the patient continued to have cramping abdominal pain and vomiting. A surgical consultation was obtained.

Physical examination at this time showed the child to be afebrile. She was moderately lethargic. The abdomen was protuberant but soft with hyperactive peristalsis and moderately high pitched bowel sounds. The mass was indefinitely palpable in the mid-epi-





FIGURE #1

Figure on the left is the pathological specimen consisting of a contiguous cast of the stomach, duodenum, and proximal jejunum.

Figure on the right is an upper gastro-intestinal x-ray film which reveals the gastric and jejunal bezoar.

gastrium. There was slight tenderness to deep palpation in the epigastrium and left upper quadrant. On rectal examination the ampulla was empty and no masses were palpable.

Laparotomy was recommended and on August 30, 1958 under general endotracheal anesthesia, the patient underwent exploratory laparotomy through a left paramedian incision. There was approximately 50 ml. of yellow serous fluid in the peritoneal cavity. A palpable firm mass was noted in the distal two-thirds of the stomach, duodenum, and upper jejunum. The stomach was moderately dilated. The proximal jejunum was dilated and edematous and there was an approximately 14 cm. intussusception of the jejunum at the most distal portion of the jejunal bezoar.

The area was packed off well to prevent contamination of the peritoneal cavity. A transverse gastrotomy was performed, with incision of the mid-fundic portion of the stomach. Using gentle traction the entire cast of the stomach, duodenum, and jejunum was removed intact. The jejunal intussusception was reduced with gentle manipulation and was viable. The gastrotomy wound was then closed and an appendectomy performed.

The mass consisted of an extremely foul smelling contiguous cast of the stomach, duodenum, and jejunum. It was composed of hair, admixed with fibers,

cloth, and string, agglutinated into a putty-like mass. (Figure #1). There was no ulceration of the gastric mucosa.

Her postoperative course was entirely benign. The sutures were removed on the seventh postoperative day and the patient discharged to her referring physician.

### Discussion

Trichobezoars of the gastro-intestinal tract occur almost exclusively in young girls. There is usually some mild personality derangement but only a small percentage of the cases have definite pathologic psychiatric problems. The diagnosis is established easily if suspected. The symptoms usually consist of intermittent abdominal pain, associated with nausea and vomiting, anorexia, weakness, weight loss, constipation, and occasionally diarrhea. A mass is frequently palpable in the upper part of the abdomen along with evidence of mild chronic malnutrition on physical examination. Gastric analysis and stool examination occasionally reveal strands of hair. A mild anemia and leucocytosis are often present.



Complications when they occur are those resulting from the bulk of the mass or secondary irritation. The mass interferes with the normal gastric activity. Inanition and physical exhaustion may result. The foreign body can mechanically obstruct the pyloric outlet, the duodenum, or the small bowel. DeBakey and Ochsner reported intestinal obstruction as a complication in 16% of the cases. The symptoms thus are usually those of high intestinal obstruction. The traumatic irritation of the foreign body can cause peptic ulceration, hemorrhage, or perforation with resultant generalized peritonitis.

The treatment after diagnosis is essentially surgical removal and psychiatric evaluation.

### Summary and Conclusions

Trichobezoars of the gastro-intestinal tract are of sufficient rarity to warrant reporting of all cases. A case of trichobezoar of the stomach, duodenum, and jejunum with intestinal obstruction secondary to jejunal intussusception is reported. The diagnosis is usually easily made from the history of the ingestion of foreign material and hair and characteristic radiographic findings. Treatment is primarily surgical removal and psychiatric evaluation. An additional case of trichobezoar of the gastro-intestinal tract is added, making a total of 231 cases in the literature. This case also presents the unusual complication of intussusception of the jejunum, which has not been previously reported.

### REFERENCES

1. Baudamant: Description de deux masses de cheveux trouvées dans l'estomac et les intestines d'un jeune garçon age de 16 ans. Hist. Soc. roy. de med., Paris 2:262, 1777-79.
2. Balfour, D. C. and Good, R. W.: Phytobezoar associated with gastric ulcer; especial reference to persimmon bezoar with report of a case. Am. J. Surg. 6:579, 1929.
3. Butterworth, W. W.: Hair ball or hair cast of the stomach and its occurrence in children; report of two instances with bibliography and synopsis of cases reported to date. J. A. M. A. 53:617, 1909.
4. Davies, I. J.: Hair-balls or hair-casts of the stomach and gastro-intestinal tract; a report of two cases of hair-cast of the stomach, with an abstract of 108 cases. Lancet 2:791, 1921.
5. DeBakey, M. and Ochsner, A.: Bezoars and concretions: a comprehensive review of the literature with an analysis of 303 collected cases and a presentation of 8 additional cases. Surgery 4:934, 1938; 5:132, 1939.
6. Hart, W. E.: Phytobezoars, J. A. M. A. 81:1870, 1923.
7. Hoyt, C. S., Burke, E. C., Hollenbeck, G. A.: Trichobezoar. Proc. Staff Meet. Mayo Clin. 33: 298, 1958.
8. Maes, U.: Bezoars; with the report of an additional case of phytobezoar. Ann. Surg. 88:685, 1928.
9. Matas, R.: Hair balls, or hair casts, of the stomach and gastro-intestinal tract. Surg. Gynec. & Obst. 21:594, 1915.
10. Mullen, J. E.: Trichobezoar: survival following complication of perforated ulcer. Ohio M. J. 53: 41, 1957.
11. Schönborn: Eine durch Gastrotomie entfernte Haargeschwulst aus dem Magen eines jungen Mädchens. Arch. f. klin. Chir. 29:609, 1883.



# DIPHTHERITIC MYOCARDITIS

CLAUDE T. PREVOST, M. D.

Anderson, S. C.

In 1877<sup>1</sup> Sanne described the toxic effect of diphtheria on the circulation: "The adult may have a feeling of impending death and bids his friends goodbye. Respiration is rapid but on auscultation there are no abnormal murmurs. The pulse is small, irregular, and unequal; soon it becomes thready; it is slowed, it rarely exceeds 80 to 100 beats; more often it falls to 50 or 40 beats; in one case it did not beat over 26." This description undoubtedly included cases of myocarditis, some with heart block.

The following is a case report with myocarditis and recovery.

A seven year old white girl was seen at home on January 18, 1957 complaining of throat soreness, fever, and malaise of 3 days' duration. She had an oral temperature of 102.3° F. and "pseudomembrane" over both tonsils. She was given an injection of 600,000 units of penicillin intramuscularly, and started on sulfadiazine. By the following morning she appeared improved; the tonsillar membranes were about half their original size and the temperature was 99° F. Cultures and smears were taken. Smears were reported the same day as being highly suspicious of *Corynebacterium diphtheriae*, and the following afternoon January 20 a positive culture was reported. The patient was given 20,000 units of diphtheria antitoxin intramuscularly and advised to remain completely at bed rest. Improvement continued for a week when she began to complain of pain in the neck and chest; her temperature was again 102.3° F. Anorexia, nausea, vomiting, associated with weakness and slight shortness of breath progressed through January 29 when she was admitted to the Anderson Memorial Hospital.

Five days prior to onset of the patient's sickness a brother had "acute bronchitis" which responded to penicillin and sulfadiazine. He has remained well.

The patient was a well developed and nourished white child who appeared pale and languid. She was covered with warm perspiration. Rectal temperature was 102° F., blood pressure 106/76, mm. Hg. and respirations 32. Her eyes were sunken and when she was undisturbed had a fixed stare upward. The neck veins were distended. There was no nuchal rigidity, nor adenopathy. The lungs were resonant and clear anteriorly and laterally to percussion and auscultation. There were no cardiac shocks nor thrills. The heart was percussed 7.5 cm. left of the midsternal line in the 5th intercostal space, and the apex beat measured

2 cm. The heart tones were distant and of poor quality, with a gallop rhythm, untimed as to systole or diastole; the rate was 150, with a regular sinus tachycardia. There was a faint apical systolic murmur. The liver was felt 2 to 3 cm. below the costal margin. The spleen was not palpated.

The red-cell count was 3,100,000 cu./mm. and the hemoglobin 9.5 Gm. per 100 ml. The white-cell count was 8,650 cu./mm. with 69 per cent segmented cells, 3 per cent stab forms, 1 per cent eosinophils, 2 per cent monocytes, and 25 per cent lymphocytes. The Wintrobe sedimentation rate was 38 mm. in 1 hour; on February 2 was 30 mm.; and on February 11 was 19 mm. in 1 hour.

A roentgenogram of the thorax taken January 30 showed "considerable cardiac dilatation and basilar pattern of pulmonary congestion and decompensation." Another on February 5 showed "reduction in cardiac size to essentially normal and clearing of all the recent pulmonary vascular changes." See Figure 1.

An electrocardiogram of January 30, 1957 was normal except for: diminished voltage of the QRS complexes of limb leads I and III; slight elevation of ST<sub>1</sub>; diminished voltage of the T-waves in limb leads I through III, and in AVL. By February 6 the voltage of the QRS complexes had returned to normal, but the T-waves were inverted in limb leads I and II, and in V-3 through V-6. These changes were still apparent in the record of March 8, but by May 6 all abnormal characteristics had returned to normal.

On January 30 the following medicine was begun and administered as described below:

- (a) Prednisolone 10 mg. at onset and 5 mg. each 3 hours for eight times, then 5 mg. each 5 hours for five times, and 5 mg. each 6 hours for 10 days, and then 5 mg. each 12 hours for 14 days.
- (b) Crystodigin .1 mg. each 1½ hours for six times; .1 mg. two times following day; .1 mg. the 3d day, February 1, 1957. No additional crystodigin.
- (c) Mercurhydrin 1 ml. (meralluride sodium) intramuscularly January 30, and again January 31, 1957.
- (d) Signemycin (olcandomycin and tetracycline) .25 gm. each 4 hours for twelve times, and then four times daily through February 5, and then each 12 hours for 14 days.
- (e) Oxygen tent 10 liters per minute until February 2.
- (f) Phenobarbital 30 mg. each 6 hours while awake until discharged home.



Figure 1. Left: Posterior-anterior teleroentgenogram of thorax taken January 30, 1957 showing cardiac enlargement and basilar pulmonary congestion. Right: Posterior-anterior view of thorax taken February 5, 1957 showing reduction in heart size and clearing of pulmonary vascular changes.

Her course had seemed downhill until some 6 hours after the institution of therapy when she appeared improved. Improvement was definite by 12 hours, as indicated by change in color, strength, heart tones, and a slowing of heart rate. Within 3 days the heart rate was 90 and the tones were normal except for a slight apical systolic murmur. By this time her general strength was better and respiration was normal even after the tent was removed. She was kept in bed during the remainder of the hospital stay and for an additional 2½ weeks at home, after which time she was allowed to sit up for progressive periods. Restricted though progressive activity was continued for 3 additional months.

Through the present time she seems normal in all respects, though a grade I high pitched systolic murmur remains.

#### Discussion

Diphtheria is chiefly a toxemia with little invasion of the tissue by the organisms themselves,<sup>2</sup> although rarely intracardiac mural thrombi often containing *C. diphtheriae* organisms, or vegetative endocarditis may occur. Amklov et al<sup>3</sup> reported finding 17 fatal cases of diphtheritic endocarditis in the literature. Eleven of these had routine premortem blood cultures. They add one case of their own, with recovery.

Gore<sup>4</sup> in a careful analysis of the clinical and autopsy findings in 221 fatal cases of diphtheritic myocarditis stated that the largest proportion were not suspected as having myocarditis before death. In one-third of the pa-

tients the local lesion had resolved and fever had subsided for a variable interval prior to cardiac dysfunction. Three-fourths of the deaths occurred from 6 to 24 days after onset of diphtheria. Myocarditis was present in 70 per cent of those who died between the 6th and 24th day, and the average duration of an illness was 14 days. Some of the manifestations of cardiac dysfunction in 143 of these fatal cases were characterized as follows: shock (hypertension, weak thready pulse and imperceptible heart action) 51.4 per cent; cyanosis 38.9 per cent; congestive failure (venous distention, pulmonary edema, hydrothorax, and painful swollen liver) 34 per cent; tachycardia 32.6 per cent; dyspnea 22.2 per cent; substernal pain and oppression 11.1 per cent; arrhythmia 7.6 per cent; orthopnea 2.8 per cent; no manifestations in 6.2 per cent.

Abnormalities in rhythm<sup>5</sup> frequently occur sometime during the second week. These may be characterized by auriculoventricular block, ectopic beats, or bundle branch block. During the third week sinus tachycardia, gallop rhythm, and cardiac enlargement occur and a significant drop in pulse pressure may be present, along with venous distention, breathlessness, and liver enlargement.

In a study<sup>6</sup> of 140 patients with diphtheria of whom all had electrocardiograms, 61 of 93



who had over 5 electrocardiograms had abnormal tracings. This study showed the desirability of performing electrocardiograms almost daily because changes were frequently transient and might occur within the first few days or not until after several weeks. Reversibility of the electrocardiographic changes could not be considered as indicating a return of the myocardium to normal. In one patient who died of pneumonia the electrocardiogram had returned to normal but at autopsy there was a severe degree of myocardial fibrosis.

The characteristics of the electrocardiographic changes could be separated into two groups:<sup>7</sup> T wave changes, and alterations in the conduction system. The majority of T wave changes occur between the 8th and 13th day. Early T wave changes are characterized by depression of the ST takeoff, with diminished T wave voltage. As the process advances the T waves become flatter and finally inverted. Improvement occurs in the reverse order of events.

Conduction changes occur most often from the 5th through the 13th day. The progression of auriculoventricular block to auriculoventricular dissociation is usually a grave sign, and a high percentage of these patients presented a terminal picture of ventricular tachycardia. The occurrence of interventricular block, or

bundle branch block is somewhat less significant.

When death occurred at the end of the 1st week, Gore<sup>4</sup> found cloudy swelling, with interstitial edema and hyperplastic interstitial cells in clumps, usually without inflammatory cells. During the second week the muscle cells underwent segmental hyaline and granular degeneration, with attenuated, fragmented or ruptured muscle cells. As the process developed histiocytes increased in number along with some plasma cells and lymphocytes, by which time hyaline and granular degeneration was more extensive. By the third week myolysis, with some beginning hyperplasia of good remaining cells was evident. Reparative<sup>8</sup> changes began to some extent in the second week and were characterized by fibroblasts, granulation tissue, and young collagen fibers; well formed scars were sometimes quite well established after 3 weeks.

#### Conclusions

In this case of toxic diphtheritic myocarditis response to treatment was rapid and seemed directly related to the use of prednisolone.

In an active infection the necessity for the use of antitoxin without delay is brought out. Some clinical findings, electrocardiographic and pathologic findings of changes in myocarditis due to *C. diphtheria* are discussed.

#### REFERENCES

1. Sanné, A.: *Traité de la Diphthérie*. Paris, G. Masson, 1877; abstracted in *Stanford M. Bull.* 14:211, 1956.
2. Wesselhoft, C.: Communicable diseases: cardiovascular disease in diphtheria. *New England J. Med.* 223:57, 1940.
3. Almklov, J. R. and Hansen, A. E.: Successful treatment of *C. diphtheriae* subacute bacterial endocarditis with penicillin and streptomycin. *Pediatrics* 5:437, 1950.
4. Gore, I.: Myocardial changes in fatal diphtheria: a summary of observations in 221 cases. *Am. J. M. Sc.* 215:257, 1948.
5. Evans, C.: *Modern treatment in general practice*, The Medical Press, London 229:117, 1953.
6. Boyer, N. H. and Weinstein, L.: Diphtheritic myocarditis. *New England J. Med.* 239:913, 1948.
7. Burkhardt, E. A., Eggleston, C., and Smith, L. W.: Electrocardiographic changes and peripheral nerve palsies in toxic diphtheria, *Am. J. M. Sc.* 195:301, 1938.



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Paroxysmal Atrial Tachycardia with Block

DALE GROOM, M. D.

Department of Medicine

*Case Record*—A lady who for most of her 50 years had taken digitalis for rheumatic heart disease was found to again have active myocarditis. Her childhood and youth had been marked by recurrent attacks of rheumatic fever, followed in middle life by a decreasing cardiac reserve. But her symptoms of exertional dyspnea, orthopnea and dependent edema had been reasonably well controlled until two years prior to this admission when she had been hospitalized for subacute bacterial endocarditis. To add to her lot, diabetes mellitus and thrombocytopenic purpura had also been found at that time and treated with insulin and cortisone respectively. Following this she was observed during several episodes of cardiac arrhythmia, one described as a sustained tachycardia resulting in prolonged vascular collapse.

The significant auscultatory findings were accentuation of the pulmonic second heart sound, a loud and somewhat snapping first sound and a systolic murmur at the mitral area, and the long rumbling crescendo murmur during diastole, with presystolic attenuation, typical of mitral stenosis. Roentgenographic studies showed a moderate degree of cardiac enlargement, predominantly of the right ventricle and the left atrium.

Treatment consisted of a low sodium diet, insulin, and digitalis in the same average dosage which she had taken for many years. Subsequently cortisone was administered again for the control of purpura, after which her cardiac rhythm changed from a normal sinus one to that illustrated here. Digitalis was then withheld and the patient given potassium chloride on the assumption that her arrhythmia was a manifestation of digitalis toxicity. However, the arrhythmia persisted with, on at least one occasion, a very rapid pulse rate and deepening congestive heart failure. The electrocardiogram illustrated here is one of several recorded during the following month after resumption of digitalis, all showing paroxysmal atrial tachycardia with varying degrees of A-V block. At no time did the patient experience any of the usual symptoms of digitalis toxicity.

*Electrocardiogram*—The P waves are regular throughout at intervals of 0.35 sec., indicating an atrial rate

of 172 per minute. Ventricular response is irregular, occurring every second, third or fourth atrial cycle, with P-R intervals ranging from about 0.10 to 0.22 sec. The P wave immediately following each ventricular response is superimposed on the T wave.

Amplitude of the QRS complexes is abnormally low—less than 5 mm. in all three standard leads. Neither T wave changes characteristic of "digitalis effect" nor ventricular ectopic beats were present in the complete twelve lead electrocardiogram.

*Discussion*—The clinical and electrocardiographic features of paroxysmal atrial tachycardia have already been discussed.<sup>1</sup> A particular type of this arrhythmia, commonly referred to as "P.A.T. with block", has the additional feature of atrioventricular block. Its recognition is of importance chiefly because most reported instances of it have been ascribed to digitalis toxicity.<sup>2</sup>

With or without block, the mechanism of paroxysmal tachycardia in the atria appears to be the same. At least both have a more or less regular repetitive atrial rate which is usually in the range of 150 to 200. The P waves tend to differ somewhat from those of a normal sinus rhythm because their origin is ectopic and, in contrast to atrial flutter, between them is some semblance of an isoelectric baseline when this is not obscured by other complexes. At the A-V node the block may be of the first, second or third degree types but commonly it is of varying degree, resulting in a varying P-R interval or ventricular response rate or both. Fortunately for this patient the block served as a protective mechanism allowing the ventricles to respond to only every second, third or fourth atrial activation. The episode of severe tachycardia during the period of digitalis withdrawal (and perhaps some of the previous ones with circulatory impairment) may have been due to loss of the protective block in the presence of paroxysmal atrial tachycardia.

Arrhythmias due to digitalis toxicity are being seen with increasing frequency. Probably there is an actual increase in their incidence, over and above that attributable to the greater number of electrocardiograms recorded or their more accurate interpretation, and some of the reasons for this have been brought to light by recent knowledge of the effect of potassium on the action of digitalis. An inverse relationship appears to exist between concentration of potassium ions within the muscle cell and the cell's vulnerability to digitalis. Generally, factors which lower intracellular potassium sensitize the cell to digitalis intoxication, and vice versa. There is evidence that congestive heart failure, ischemia, anoxia, edema, as well as the adrenal steroids and digitalis itself, are

conductive to loss of potassium from the muscle cell. Such losses may or may not be reflected in the serum (extracellular) K level. But from a practical standpoint, it is probably depletion of the body's potassium stores through the use of diuretics which accounts for most of the digitalis intoxications and arrhythmias which arise during treatment for congestive heart failure. Both mercurials and the newer oral diuretics augment renal excretion of potassium, and the resultant increase in myocardial irritability becomes especially pronounced when the intake of sodium is restricted. With manipulation of electrolytes by vigorous or continued diuretic therapy and salt restriction it is not uncommon for signs and symptoms of digitalis intoxication to make their appearance for the first time without any increase in the dosage of digitalis, for toxicity is not a function of the dosage alone. And conversely, digitalis-induced arrhythmias may be effectively suppressed by administration of potassium.

Both paroxysmal atrial tachycardia and atrioventricular block have multiple causes, including organic heart disease. In this patient's case the arrhythmia was more likely a manifestation of active rheumatic carditis than digitalis intoxication alone, as evidenced by absence of the usual symptoms and electrocardiographic signs of toxicity to the drug, failure of the arrhythmia to revert to normal when the drug was withheld and potassium administered, and its observed duration over a period of several weeks. Furthermore, the low voltage of all QRS complexes, especially in the face of known valvular disease and cardiac enlargement, bespeaks an organic basis for which the patient had abundant evidence. One wonders, however, whether the cortisone and salt deprivation might not have lowered the threshold of toxicity to digitalis.

The onset of P.A.T. with block in a patient receiving digitalis may indicate a near lethal level of the drug. Thus there is some urgency about determining whether the arrhythmia is or is not due to digitalis. If so, additional dosage (often used to abort ectopic atrial arrhythmias) would be extremely hazardous. Recognition of P.A.T. with block is therefore crucial in such cases, and commonly this requires careful scrutiny for transient Wenckebach periods or for blocked P waves concealed in QRS or T deflections to distinguish the arrhythmia from other tachycardias.

## REFERENCES

1. Groom, Dalc. Electrocardiogram of the Month, J. South Carolina M. A., 54:327, Sept., 1958.
2. Atrial Arrhythmias, Digitalis and Potassium, by Lown and Levine. Landsberger Medical Books, Inc., New York, 1958.

## ABSTRACTS

*Fiberglas in the Eye.* Thomas R. Gaines, M. D., (Anderson) A. M. A. Arch. Ophth. 60:941-944, Nov. 1958.

A case of intraocular foreign body consisting of a filament of glass (Fiberglas) is reported, the foreign material having remained within the eye for a period of 3 years and 10 months.

Despite repeated slit lamp, gonioscopic, and ophthalmoscopic examinations the presence of a foreign body was not proven until more than five months had elapsed.

Without explanation, there were periods of quiescence alternated with periods of activity, one period of quiescence having lasted more than two years without symptoms, during which time the patient worked uninterruptedly.

During the final four months previous to the removal of the foreign body, activity in the eye was such that it was believed that the point of tolerance had been reached and that there was danger of loss of the affected eye, with possible involvement of its fellow.

Due to the small diameter, (about the size of 00000 gut), the length, (4.5 mm.), and the translucency, such material is not easily seen, thus making its surgical removal difficult and hazardous. One attempt by means of routine procedure including incision through the limbus into the anterior chamber with wide iridectomy and irrigation of the anterior chamber under a conjunctival flap was a failure. Fortunately, the second, three years later was successful. After removal of the foreign material the eye quickly became quiescent, with return of visual acuity to 20/20.

*The Effectiveness of Dithiazanine Against Worm Infections in Mental Patients.* Martin D. Young, Sc.D., Geoffrey M. Jeffery, Sc.D., Joe E. Freed, M. D., and William G. Morehouse M. D. (Columbia) A. M. A. Arch. Neurol. and Psychiat. 80:785 (Dec. 1958)

Dithiazanine iodide (Delvex (R)) was tried against hookworm and *Trichuris* infections in mental patients. Eight hundred milligrams daily in divided doses were given for five days. Eighteen of 23 *Trichuris* infections were eliminated and the remaining five greatly reduced. The overall egg count was reduced by 98.9 per cent. None of the 27 hookworm infections was eliminated. The overall reduction of hookworm egg counts was 39.6 per cent.

Dithiazanine appears to be very useful against *Trichuris* infections in mental patients which, up until the present, have been difficult to eradicate.





## PRESIDENT'S PAGE

The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

The laity and the press are eager to learn all they can about the most recent advances in the cure of diseases that have so long baffled the efforts of men to cure. Likewise, all efforts toward betterment of community health and well-being are of especial interest in the public eye. The same can be said for civic enterprises entered into by medical men.

Each county medical society should constitute a publicity committee whose duty it would be to give to the daily press all accurate information on medical subjects of interest to the public. This should be done without mentioning names from whom this information comes, except in special instances. These instances are medical meetings having press coverage and any brilliant performance by any individual or group of individuals cleared through their local medical societies for publication. By adhering to these rules the difference between the reputable physician and the quack has been clearly defined.

It is the personal opinion of many physicians that public relations can be immeasurably improved by the activity of honest, clear thinking doctors taking part in various worthy civic enterprises. The use of the physician's name in connection with a civic project should not be considered contrary to the Principles of Medical Ethics.

R. L. Crawford, M. D.  
President

# Editorials

---

## THE MEDICAL LETTER

From many quarters there comes the cry that we medical people are being bombarded with too much persuasive material from the pharmaceutical houses. Certainly we are more than delighted when a firm has a new product to offer and when it sends along with its announcement some adequate clinical estimate of the real virtue of the recent production. In many cases the claims made are quite moderate, and are based on well-founded research and clinical trial, but in other instances the enthusiasm seems to be somewhat premature and the recommendations somewhat broad in view of the limited trial of the new drug. It is true that we can search the current literature for confirmation of the claims which we read, and we have several official sources, such as those of the AMA, from which information may be had. However, the first is difficult for the busy practitioner, and the second may be somewhat slow because of the volume of demand upon it. It is undoubtedly and unfortunately true that many of us do not go to the trouble of seeking primary sources or impartial judgment, and are very much inclined to accept without question, or at least hopefully, the claims which the detail man or the brochure presents to us.

A new publication promises to help a great deal with our difficulties. *The Medical Letter* is a newcomer to the field of medical journalism, and aims to supply to its readers in a relatively brief form impartial and well considered estimates by most reputable medical authorities of the true value of drugs recently introduced. *The Letter* is literally a letter in length, and carries no advertising, and is a non-profit publication which is dependent on the fees of subscribers for its support. No doubt it will have some iconoclastic features, and also some confirmatory estimates of values which have not been entirely clear.

Obviously the value of such a publication must depend on the impeccable integrity of the people who produce it. There seems to be

no doubt that the necessary qualities are established in its production, and if subsequent issues are as informative as was the first issue, it seems that we have a new and valuable addition to our therapeutic judgments.

---

## A FAT-FREE COOKING AID

Doctors who have occasion to prescribe low calorie or low fat diets should be interested in a new product which has recently appeared. This is a fat-free cooking aid which comes in a spray package which is very handy in administering the proper coating to the necessary utensils for cooking. Home experience with a sample has led us to believe that it is a useful material, and does all that the ordinary fat can do toward proper cooking. As a great many of our medical friends could do with a little less fat content, it might be worth their while to look into this method of eating your "fat" and not having it too.

---

## THE DISCIPLES OF FLORENCE NIGHTINGALE

Individually the nursing profession of today is composed largely of dedicated women, devoted to the care of the sick. The defects present are not of their own choosing. To conduct a training school eligible for accreditation is an expensive proposition. This financial consideration has caused many of the smaller hospitals to close their training schools. In those that continue, the costly budget of training is added to the bill of the unfortunate ill, who can least afford it. The intricacies of bedside nursing have been engulfed in the training of the student with the addition of supernumerary remotely related courses of instruction. Ethics and discipline have disappeared in the curriculum. The care of the patient is becoming incidental in the rush to meet the standards of education.

There must be some happy solution to this dilemma which has arisen in our sister profession. The nursing educators are striving for

full emancipation from doctor control and in their endeavors are placing the nurse further and further away from patient care. Reforms must be instituted on a national scale by the medical profession to bring back the graduate nurse's position of dignity so that she may render kind understanding to the sick and receive sufficient recompense to compare with industry. The national socialistic tendency is creeping into the training of student nurses and is furthered after graduation by job qualifications demanded for accreditation. It is up to us, the physicians, to put our finger in the dike and attempt to stem the tide.

*Worcester Medical News*

### **REPORT OF A DELEGATE TO THE AMA**

The meeting of the American Medical Association held in Minneapolis, Minn., December 2 through the 6, 1958 was one devoted to listening to reports of the various Committees and Commissions that had, in some instances, been working on problems for periods of months and in many cases, years. One cannot realize the tremendous amount of effort that goes into the work of this House of Delegates. The speaker, Dr. Vincent Askey, and the Board of Trustees had done a tremendous amount of spadework before the House convened.

The reports of the Commissions and Committees had been sent to the Delegates before they arrived in the convention city. The Reference Committee had been appointed and a great deal of the subject matter, to be considered, had already been assigned to the Reference Committee for hearings. Among the reports, probably the hottest, was that of the Medical Care Plans, which was referred to the Reference Committee on Legislation and Insurance. This report related to the relationship of the Third Party in the provision and financing of Medical Care. There had been a great deal of work made of this subject and particularly was it a touchy matter in the coalmining states where they have been dealing with Third Parties for quite a while.

Another matter that had been studied for sometime by the Commission on Medical Care was the coverage of the "Senior Citizen" by some form of insurance. This matter involves medical care for the sixty-five year old and older peoples. It was brought out that in many states the Blue Plans are protecting these older people but it is not universal and some steps must be taken to see that they do get help and it was very forcefully called to our attention that the medical profession should lead the way. Various plans are being considered, one of which is that medical fees should be lower for this class of persons than for others. This Commission on Medical service has, over

the years, studied such phases as: (1) Insurance and Prepayment Plans; (2) Health Program for Older Citizens; (3) many studies in the Processes of Aging; (4) Nursing Homes; (5) Federal Medical Services; (6) Veteran Medical Care Plans; (7) Medical Care of Civil Service Employees; (8) Workmen's Compensation; (9) Indigent Care; (10) and the Cost of Medical Care. A number of meetings and many miles of travel have gone into the preparation of this Commission.

Another Commission of the AMA that has done yeoman's work is the Commission on the Study of Medical Care Plans. This Commission analyzed many, many plans that were serving millions of people. They also considered many of the Blue Plans in the various states.

The report of the Board of Trustees is voluminous. This work goes on throughout the year and many matters pertaining to medicine are processed by this body. It is a credit to this state that we have one of our members of the Board, Dr. Julian Price, who is doing a magnificent job, and who is considered a most valuable member.

The president's address, delivered by Dr. Gunnar Gunderson, was very forthright and, in my opinion, left the thought with the Delegates that many questions, that have been under consideration by the AMA, should be studied thoroughly and action should be taken without the usual hedging that has been so often the case. To illustrate, I quote from his address: "In our relations with third parties we cannot deny the validity of criticism. We should welcome it, study it and learn from it. A critic of the schools is no more automatically an enemy of education than the music critic is an enemy of music. By the same token, a sincere critic of bad medicine can be the best kind of friend for *good* medicine. We should try to cultivate and convince those with whom we have differences. We also should appraise some of our own programs—among them, the effectiveness of our policing of that minority of physicians whose actions bring discredit and trouble to all of us.

"We need a clear, definitive policy regarding medicine's relations with so-called third parties. I hope that it will come out of the long-awaited report of the AMA Commission on Medical Care Plans, which will be considered by you at this session. This report, which urges a "judicious, tolerant and progressive attitude toward developments in the medical care field," deserves careful attention and thorough discussion by every delegate and interested party.

"To sum up my message today, I would emphasize that we must learn from the past, but we also must realize that we cannot turn back the clock. We can and must anticipate the needs of the future, without wrecking basic values and principles. We need be neither radical nor reactionary in our approach to our problems. Our course should be one of dynamic progress—in medicine and in our national life."



Another address that was most enlightening was that of the Governor of Minnesota, the Honorable Orville L. Freeman. I would like to quote from his address for I think it was very timely that we should have the opportunity to hear from the politician. The Governor stated in his address and, I quote: "The term 'socialized medicine' apparently means different things to different people. A simple answer as to its meaning might be the providing of medical care through some branch of government. Yet that definition is inadequate for our purpose, because we all take it for granted that government should provide medical care in certain cases,—as, for example, in tuberculosis and mental hospitals. We in the United States have asked for and have thoroughly accepted this principle for so long that I feel sure that the most ardent opponents of socialized medicine, by whatever definition, would not ask that government cease that function. Perhaps the term really refers only to the government assuming further functions over and above those which it now has. Or does it more specifically refer to action in which the elements of universality and compulsion are present?"

"This confusion about the meaning of the term 'socialized medicine' is most unfortunate. The term in itself often arouses violent and sometimes emotional disagreement, among some who do not agree on what they are disagreeing about. Semantics, the science of

words, then becomes almost as important as substance. We can lose sight of real problems and real issues in our confusion about the meaning of words. I often wonder whether a misunderstanding about the meanings of terms does not often create as much conflict and disagreement as is created by an actual difference in opinion and judgment.

"When government provided hospital and medical care for the victims of long, expensive, chronic ailments such as tuberculosis and mental illness, it did so for similar reasons. It was socially desirable that the people suffering from such ailments be given care and treatment. Very few could afford such long and expensive care. The people asked government to provide it, because that was the only way it could be made available.

"The same principles hold true, I believe, in all other areas where government performs functions relating to medicine. Government provides a substantial share of the cost of educating doctors because it is socially desirable and necessary. Government carries out those public health functions that could be performed adequately in no other way.

"Many Western European democracies have adopted universal health care programs with some degree of compulsory participation. Such programs are, I believe, what most of you think of when you use the term 'socialized medicine'. But we in the

National Society for Crippled Children and Adults  
2023 W. Ogden Ave., Chicago 12, Ill.

United States have greater resources and higher standards of income than any of these nations. And we have gone a long way in the development of voluntary programs using the insurance principle to make it easier for people to pay for their medical care. *If these programs meet the needs of the American people adequately, there will be no reason for government to be asked to step in.*

*"Personally, I do not want government to be any bigger than necessary. I do not believe in compulsion except where it is essential to achieve a socially desirable goal. But where an essential goal can be achieved in no other way, under our American democratic system, government has in the past, and will in the future, be called upon to take care of urgent, unmet needs.*

"Our goal in the field of medical care for the American people is one on which I am sure the medical profession and government are in total agreement. We want to insure the availability to all Americans of medical care of the best quality, and in sufficient quantity to meet their needs. We must cooperate to achieve this goal. We must work it out together.

"I want now to present to you one area in which the problems we face in working toward that goal urgently demand a solution. I want to ask your help in developing a program to meet, more adequately and efficiently, the medical care needs of our senior citizens.

"For the first time in the history of the United States the dependency ratio in our population is increasing. Up until 1940, those age groups in our population that are usually dependent on others, the young and the old, were steadily decreasing in proportion to those in the productive age group. Since that time, the trend has been reversed.

"To show specifically what this means—we have tried to analyze the probable population changes expected in Minnesota from 1950 to 1965. As a whole, our population is expected to increase 22% during that 15-year period. But the increase will not be uniform in all age groups. Those under 21 will increase by 38%, and those over 65 by 35%, while the increase in the productive years between 21 and 65 will be only 9%. Thus, proportionately fewer people in the productive—and taxpaying—years will have to provide for greater educational services for increasing numbers of children and youth, and greater social and medical services for increasing number of the aging population.

"Thus, we face the problem of providing medical care for increasing numbers of older people. Government now is expected to provide such care for those who are on Old Age Assistance. In Minnesota we provide all Old Age Assistance recipients with medical care according to their needs, and we are one of the few states that place no ceiling on expenditures for such care. *These medical care costs are constantly increasing.* And while social security pensions are

reducing the numbers of people who need old age assistance for ordinary living expenses, they are not sufficient to cover expenses of serious and chronic illness. Thus, there are increasing numbers of retired men and women who have earned pensions sufficient to meet their needs *as long as they stay well*, but insufficient to meet their *medical care needs*. If and when they become ill, those costs become an increased burden on government.

"Thus far private, voluntary insurance programs,—however rapidly they have grown as a whole,—are least effective for the age group over sixty-five. Employee group programs often cease with retirement, and premium costs for individuals of that age are generally too high for them to pay.

"It is because of this great need that legislation has been proposed in Washington,—and, no doubt, will be proposed again,—to expand the federal social security program to include hospital and medical insurance benefits under Old Age and Survivors' Insurance. It was introduced at the last session of Congress in the Forand Bill, which, *I believe, you officially and vigorously opposed.*

"Now, you certainly have the right to oppose such legislation if you believe it would be harmful to your profession. You have the duty to oppose it if you believe it would be harmful to the public. *But if you do oppose it you also have the responsibility of helping to work out an alternative program to meet the need that we all know exists and becomes more serious every day.*

*"A solution is urgently needed.* Our costs for medical care for the aging must compete with increasing demands for greater expenditures for education and for mental health, and for scores of other urgent demands. The burden on state government for increasing services is constantly getting heavier in every field. States are assuming a greater proportion of responsibility in non-defense spendings:—where in 1940 the states provided 58% and the federal government the other 42%, the states in 1956 were providing 73%. If state governments are going to meet this increased share of constantly growing responsibilities they need sound planning and wholehearted cooperation of all interested groups.

"I appeal, then, for your help in cooperating with government to develop a more *adequate program for medical care for the aging.* All of our people stand to benefit by a program that would relieve them of worry about insecurity and dependency in old age.

"We cannot retreat from our position of providing Old Age Assistance recipients with adequate, highest-quality medical care. We want to make sure that other senior citizens whose incomes are small, yet enough for independence as long as no extraordinary expenses are required, need not become "medical indigents" when they become ill. We want personal dignity as well as health for our later years.

"The proposal to include medical and hospital care



insurance under OASI benefits does offer one solution. It may not be a complete solution or the best solution. It may not be acceptable to you or to the Congress. But it would offer help to state governments,—hard pressed to find ways to meet all the needs for services for which they are responsible.

"I believe that, together, government and the medical profession can work out such a program.

"Can you help us to find a way to apply the voluntary health insurance principles to elderly and retired people? Can you help us to develop a program, that is within our means, to provide the kind of preventive care and attention that will make the sunset years healthier and happier? Can you help us find ways to make available to all who need it the kind of physical rehabilitation that your scientific progress has already developed?

*"We need this help and cooperation urgently. The people feel this need, and when they feel it badly enough, they demand that it be met. The people then say, "there ought to be a law." Yet the best solution is seldom reached in an atmosphere of urgent need or bitter controversy.*

"I believe that our best course in seeking the right answer is in sincere and wholehearted cooperation involving the medical profession and government as well as the people who need the services.

*"It is certain that we must find a solution, without further delay. Certainly a Society with the great resources we have in both material goods and scientific talent cannot leave the health and happiness of our senior citizens to chance. I ask the help of the leaders of the medical profession in working out a program that will most adequately meet the needs of our older citizens for health care and services of the highest quality. I know that government in the interest of the people must not—and cannot—avoid that responsibility."*

There were some seventeen resolutions introduced. Among them were leaving the recognition of the osteopaths to the various states; the licensing of paramedical Groups, and Civil Defense matters.

The volume of the many matters brought before this House is such that a detailed account is almost an imposition upon the readers' time and especially since these accounts are published in the Journal of the AMA and a resumé in the Journal of the South Carolina Medical Association.

I would certainly advise every member to read and digest all this material, for the medical scene is a fast changing one and it behooves each and every doctor to become acquainted with this changing times and try to keep up.

For the members of the profession who think that the AMA is *not* doing anything about the many political issues that are being raised, I would invite your serious consideration of the *Proceedings of The House of Delegates of The American Medical Association, Minneapolis, Minn., December, 1958.*

Charles N. Wyatt, M. D.



"WHERE'S THE PATIENT?"

#### STATEMENT ON GOVERNMENTAL SUPPORT OF MEDICAL RESEARCH

The Board of Directors of the Pharmaceutical Manufacturers Association believe that it is constructive at this time to state their views as to the support of medical research and education by the Federal Government. At their meeting in New York City, January 8, 1959, they therefore approved the following statement.

♦ ♦ ♦ ♦

In 1940, according to the Report of the Committee of Consultants to the Secretary of Health, Education, and Welfare, commonly known as the Bayne-Jones Report, the Federal Government contributed \$3 million to medical research. In 1958 federal expenditure for medical research reached \$227 million. (Data relating to the National Institutes of Health, September, 1958.)

The pressures upon the Congress and upon Federal agencies for *practical* results are apparent and unquestionably will increase in direct relation to the size of the expenditures. But as the Bayne-Jones Report states, "pressures for practical results cannot be allowed to supersede the kind of fundamental studies, which, over the long run, produce revolutions rather than merely improvements in health standards". In his communication of last July to President Eisenhower, Dr. Alan T. Waterman, Director of the National Science Foundation, makes a similar statement: "As history amply records, the most epoch-making scientific discoveries have come from basic research".

Some noteworthy basic research is being carried out in the laboratories of the pharmaceutical industry, but the major centers for this basic effort are non-



profit institutions, universities, medical schools and research institutions. The research and development work of our industry largely rests on this foundation. On the other hand, the pharmaceutical industry, with its \$127 million expenditure in 1957, and at least \$170 million in 1958, already does outstanding applied research and development leading to clinically useful products. After every advance in the laboratory and clinic, it has been the pharmaceutical industry which, with its own funds, has created the modern medicines which have benefited so many.

The present cancer chemotherapy program, involving an extensive series of contracts with pharmaceutical firms, should not be taken as a precedent for the attack on other disease categories. In the cancer field, the lack of leads after so many years of effort together with the nature of the problem, probably required a government subsidy to industry (devoted principally to an experimental mass screening program of all types of chemical agents) in order to supplement the basic research program being carried on in the laboratories of non-profit institutions.

In fields other than cancer, the pharmaceutical houses are pushing the search for new drugs with adequate funds and with every means at their disposal in the light of present knowledge. It is our basic knowledge that needs to be increased, as rapidly as possible, and Federal funds should be channeled to academic institutions, which need them to support and expand their basic research.

Moreover, in our total medical research activities the paramount problem is the critical shortage of scientific personnel. The extent of this personnel shortage is well documented: The Bayne-Jones Report indicated that 25,000 additional scientists will be needed by 1970, but that present training facilities will provide only 19,000. This is a deficit of more than 30 percent. A recent editorial in the J. A. M. A. (November 15, 1958) points out the alarming number of unfilled faculty positions in our medical schools even today.

Government subsidies for industrial research would still further accentuate this manpower problem. It must be recognized that there are only three ways by which a pharmaceutical firm can staff a government subsidized project. The first is to divert its own scientists from projects on which they are already working. The second is to obtain additional personnel from other firms, which results in a wasteful pattern of raiding. The third—easiest but most destructive—is to obtain the needed people from academic life, thus depleting still further the supply of teachers and scientists engaged in basic research.

In view of the current trend towards government-industry "crash programs" in electronics, aircraft and other fields of research, it may seem surprising for the pharmaceutical industry to urge that funds for

medical research go mainly to academic institutions. For the reasons stated above, however, this Board believes that in the allocation of Federal funds for medical research—which as the Bayne-Jones Report states is inherently inseparable from medical education and training—the following principles should be adopted.

1. Since our further progress in medicine directly depends upon the supply of highly-qualified scientists, the training of additional teachers and research personnel should have highest priority.

2. Government funds should be principally allocated to basic research objectives, to expand our fundamental knowledge in all medical fields, rather than to applied research and development.

3. Except in unusual circumstances, government funds should therefore be allocated to non-profit institutions, such as medical schools, hospitals, and research institutions, rather than to private industry. Private industry should be subsidized only in cases where no non-profit organization can do the job. In such exceptional cases, however, full cooperation can be expected from a pharmaceutical firm approached by the Federal Government because of its unique qualifications.

---

#### NATIONAL ADVISORY COMMITTEE To The SELECTIVE SERVICE SYSTEM RESERVE STATUS

The National Committee has voted to notify medical schools and hospitals that if any of their staff or faculty are members of the Ready Reserve, they and the individuals concerned should make note of the fact that they will be expected to go when called and not be declared essential to the institutions at the time such a call is made.

If any such individuals are now in essential positions—either on faculty or staff—they should request transfer from the Ready Reserve to the Standby Reserve; otherwise the Ready Reserve is not a Ready Reserve.

By making such transfer they will, of course, lose pay. They will not lose credit toward retirement.

This should be looked into at the present time and straightened out now rather than waiting for an emergency to occur. In other words, it is essential for the medical schools and the hospitals to determine the military status of the members of their faculties and staffs. In that way and only that way will they realize what their loss would be on the day an emergency is declared.

This obligation of members of the Ready Reserve to serve when called also applies to physicians in private practice. Only in very exceptional cases would such individuals be given consideration for delay due to essentiality.



# BLUE CROSS . . . BLUE SHIELD



## HIGHER BENEFITS AND HOW TO COLLECT THEM

Recently, it was announced that Blue Cross and Blue Shield had increased some benefits, effective January 1, 1959. These were:

1. An increase of 1/8 or 12-1/2 per cent on the entire Blue Shield standard surgical contract.
2. An increase of the in-hospital medical fee allowance from the former 28 days per contract year to the new allowance of 70 days per illness.
3. An increase on a trial, administrative basis of the out-patient surgical care allowance and the emergency room care allowance from the former limits of \$10.00 and \$15.00 to the new unlimited allowance. This unlimited allowance is being tried on the supposition that a doctor may make use of hospital facilities in treating a Blue Cross-

Blue Shield patient, without having to admit the patient to the hospital. This should save the doctors and patients time and money and should save Blue Cross the expense of paying for room and board charges which would be incurred were the patient to be admitted.

These benefit increases have been warmly received, but there are some who wish to know how to collect these additional Blue Shield fee allowances.

The procedure is quite simple. In the past you have multiplied the units shown beside a procedure in the manual by \$2.00 to determine the amount Blue Shield will pay. Thus, an appendectomy having a unit value of 35, when multiplied by \$2.00, would formerly have paid \$70.00. Now under the new increased benefit schedule, all procedure units are multiplied by \$2.25. The appendectomy is now paid for at the rate of 35 units x \$2.25, which equals \$78.75.

---

## THE MONTH IN WASHINGTON

Washington, D. C.—Contrary to the usual procedure in a first session the 86th Congress this year already is getting on with its work, particularly in health fields. In past Congresses, not much is accomplished the first session, with most bills held over to the second, which always is an election year.

The session was only weeks old when action was under way. Here are some of the developments, portending enactment before adjournment of a number of bills:

1. After hearings, a subcommittee of the Senate Banking and Currency Committee reported favorably on a housing bill that contained provision for mortgage guarantees for proprietary nursing homes. Subsequently, the measure was passed by the Senate.

At this writing the House is at work on another housing bill that also contains the nursing home loan section. With House passage assumed, the question is whether the bill (containing more money than the White House wants spent) will be vetoed, and if vetoed whether it can be enacted anyway by two-thirds majorities in both houses.

2. Without bothering with hearings, the House Ways and Means Committee overwhelmingly approved the Keogh bill to encourage retirement plans for the self-employment. It acted in line with the committee's established procedure to quickly reapprove bills that passed the House the previous Congress, but not the Senate. The Keogh bill is identical with a measure that easily cleared the House

last session but lost out in the Senate.

3. Driven forward by Chairman Carl Vinson of the House Armed Services Committee, legislation to extend the regular and doctor drafts four years rolled through the House. However, indications were the Senate would take its time and give careful consideration to the need for a four-year extension.

4. The Senate Labor and Welfare Committee, under the leadership of Chairman Lister Hill (D., Ala.), demonstrated its interest in legislation for the aged, Senator Hill named a subcommittee to make a full year's study of problems of the aged, taking in housing, employment and recreation, as well as medical aspects.

Chairman of this subcommittee is Senator Pat McNamara, Detroit Democrat. Other Democrats are Senators John Kennedy of Massachusetts, Joseph Clark of Pennsylvania and Jennings Randolph of West Virginia. Republicans are Senators Everett Dirksen of Illinois and Barry Goldwater of Arizona.

5. At the same time, three members of the standing health subcommittee of the Hill Committee, Senators Jacob K. Javits of New York, Clifford B. Case of New Jersey and John Sherman Cooper, all Republicans, asked Congress to authorize a two-year study of the health problems of the entire population. If approved by Congress, the investigation would look into the quality and quantity of health services, problems of extending health insurance, special problems of the aged and minority groups, and the distribution of health services.





Photo by E. S. Powell

#### STATE BOARD OF MEDICAL EXAMINERS

(Standing, left to right): Dr. Wm. P. Turner, Greenwood; Dr. Harold S. Gilmore, Nichols; Dr. Roderiek Macdonald, Roek Hill; Dr. A. Richard Johnston, St. George; Dr. Kirby D. Shealy, Columbia.  
(Seated, left to right): Dr. Wilbur R. Tuten, Sr., V.-Pres., Fairfax; Dr. George R. Wilkinson, Pres., Greenville; Dr. Harold E. Jervey, Jr., Secretary, Columbia.

#### MEDICAL EXAMINERS

The State Board of Medical Examiners of South Carolina held its semiannual meeting in Columbia on December 9-10, 1958. Seven applicants were interviewed, their credentials checked, and they were registered for the examinations. Thirteen applicants for licensure by endorsement were licensed after they were interviewed and their credentials were checked.

After routine items of board business were handled, the President made a report of his recent meeting with the Council of the South Carolina Medical Association. He reported that Council expressed confidence in the manner in which the Board is handling and attempting to solve the prob-

lem of foreign medical graduates; also, Council's action in going on record as favoring the principle of biennial registration for physicians in South Carolina. The Secretary reported that he will work with the Chairman of the Committee on Legislation and Public Policy of the South Carolina Medical Association in drafting a resolution to be introduced from this Committee to the House of Delegates at its May meeting.

Hearings were held on seven physicians charged with violating the laws governing the practice of medicine in South Carolina. No licenses were revoked or suspended but several of the violators were placed on probation for varying periods of time.

---

### NEWS

---

#### DR. TOM BROCKMAN

Dr. Tom Brockman, who practiced medicine in Greer for 23 years before moving to Greenville, recently had a much deserved tribute paid him for 49 years of service by the Greenville County Medical Society. Dr. Tom was born at Reidville and he stood fourth in his class of 42 at the Medical College of South Carolina where he graduated in 1909. He has served as president of the County, District and State Medical Association with distinction. The tribute says

of Dr. Tom: "He was a leading citizen as well as a leading doctor. He was active in the affairs of his church and in all civic enterprises and was one of the most progressive mayors the town (Greer) ever had. So he became a great doctor, a fine citizen, a religious leader, a true humanitarian. He was recognized and accepted in each of these categories of human endeavor. Recognition gave rise to other demands for counsel—not in medicine alone, but in all the problems of life. He became a non-professional but wise and sympathetic listener and adviser. Perhaps in the capacity of counselor, when counselors, psychologists, psychiatrists, and capable ministers were unavailable, he gave his greatest service".



## DARLINGTON HAS NEW DOCTOR

Dr. Norman S. Richardson, Jr., a native of Darlington, has begun the general practice of medicine in Darlington in association with Dr. John M. Wilson.

Dr. Richardson was graduated from the Medical College of South Carolina in 1957, and before coming to Darlington he interned at the Columbia Hospital in Columbia.

He is a graduate of the St. John's High School in Darlington and of The Citadel.

---

## DR. MANN TO BEGIN PRACTICE AT PICKENS

Dr. Robert G. Mann began the practice of general medicine in Pickens January 6, in association with Dr. Sydney A. Garrett.

Dr. Mann graduated at Pickens High School and attended North Greenville Junior College and graduated at Wofford and from the Medical College of South Carolina in 1956. Following his graduation he interned at Greenville General Hospital. For the past two years he has currently completed a tour of duty in the U. S. Air Force Medical Corps where he holds the rank of captain.

---

## DR. LYNCH HEADS RESEARCH BOARD

Dr. Kenneth M. Lynch, president of the Medical College of South Carolina, has been elected chairman of the Scientific Advisory Board of the Tobacco Industry Research Committee.

Grants totalling \$500,000 for scientific research were also announced by the Committee. One of these goes to Dr. H. R. Pratt-Thomas, professor of pathology at the Medical College.

Dr. Lynch, dean of the faculty and professor of pathology at the local college, has been a board member since its organization in 1954. He succeeds Dr. Clarence Cook Little who first was elected president in 1954.

The Scientific Advisory Board is responsible for research policy and programming for the Tobacco Industry Committee. Grants are made on recommendation of the board of independent scientists working in recognized universities, hospitals and other institutions.

Dr. Pratt-Thomas's renewal grant is for work in "application of a new bio-assay technique in examination of cigarette smoke and condensates for possible carcinogens (cancer elements)." He has been conducting similar studies for the past eight years.

## POLIO VACCINE

The House of Delegates of the American Medical Association on December 4, 1958 unanimously recommended that the following steps be taken in the poliomyelitis inoculation program:

(1) Each physician assume the responsibility for making certain whenever possible that all members of families he serves receive protection against poliomyelitis by having the three full doses of polio vaccine;

(2) State medical organizations arrange with state health departments for a joint effort to bring together county medical society representatives of county and city health departments for the purpose of discussing the need for joint study committees at the local level to survey the problems which may exist and to work jointly to solve them;

(3) County medical societies meet with county and local health department representatives to create study committees to survey the problem of immunization as it may exist in the local area and develop and implement a satisfactory program to meet the local situation.

---

Paramedical groups have raised their educational sights too high, a hospital administrator stated in the February 1 issue of *Hospitals*, Journal of the American Hospital Association.

Nathan Bushnell, III, administrator of Franklin Memorial Hospital, Rocky Mount, Virginia, said the insistence on raising the standards of schools and the requirements for registration by national societies is prolonging the personnel shortages that the paramedical groups are trying to overcome.

Although it is understandable and commendable for groups such as occupational therapists to try to elevate the professional status of their members, he said, these groups should temporarily slow down and supply practical, immediate solutions to patient care problems.

"There are numerous aspects of every medical and paramedical field which can be efficiently handled by persons with minimum schooling or on-the-job training," Mr. Bushnell added.

He recommended that short-term training programs for practical assistants be developed in all the paramedical groups. Pointing out that numerous hospitals have resorted to this plan with excellent results, he urged the organizations to seize the initiative and expand the idea.

Mr. Bushnell advised the groups to encourage this type of training by establishing curriculum and providing basic textbooks. This would give prompt relief to personnel shortages, he added.

---

## ANNOUNCEMENTS

---

### FAMILY DOCTORS SCHEDULE SAN FRANCISCO MEETING

What does the "space age" mean to medicine? How do doctors treat bad burns? What's new in the realms of heart surgery, foot fractures, hypertension and diabetes? These and countless other questions will be answered at the American Academy of General Practice 11th Annual Scientific Assembly, April 6-9, in San Francisco's Civic Auditorium.

The scientific program will feature 28 prominent physician-authorities. More than 100 scientific and 300 technical exhibits will be prepared for the 7,000 doctors and guests expected to attend. The Academy is the nation's second largest medical association and the only American medical group organized strictly for family doctors.

Mac F. Cahal, executive director of the 25,000-member organization, says the 1959 scientific program offers an exciting and valuable postgraduate education opportunity for physicians.

---

The Duke University Medical Center will have its Fourth Medical Cruise to the Caribbean, sailing from New York April 2, returning April 14; sailing from Wilmington, North Carolina April 4, returning April 13. Those interested should contact the Director of Postgraduate Medical Education, Duke University Medical Center.

---

### SCPHA TO MEET IN CHARLESTON

Charleston has been named the site for the 1959 annual meeting of the South Carolina Public Health Association. The meeting will be held on May 7th through 9th with headquarters in the Francis Marion Hotel.

---

The Association of American Physicians and Surgeons, a national organization representing the nation's physicians in medical economics, public relations, legislation and freedom, will hold its 16th Annual Meeting of the Assembly and Delegates at Fort Worth, Texas on April 2, 3 and 4, 1959.

---

On April 9 The Southeastern Society of Neurology and Psychiatry will meet with the S. C. District Branch of the American Psychiatric Association. Fort Sumter Hotel, 6:30 P. M.

---

The Tri-State Medical Association will hold its annual meeting in Winston-Salem, N. C., at the Robert E. Lee Hotel, March 16 and 17, 1959.

### 11TH INSTITUTE OF PSYCHIATRY AND NEUROLOGY

APRIL 10 IN CHARLESTON

- Dr. Stewart Wolf—Prof. Med. Univ. Okla.  
"The As—If response as a pathogenic mechanism"  
Dr. Paul Hoch—Commissioner of Mental Health,  
State of N. Y.  
"Psychoneurotic Schizophrenia"  
Dr. Charles Watkins—Prof. Psychiatry, L. S. U.  
"Psychological factors concerned in breast mass in  
women"  
Dr. Israel Ziverling—Assoc. Prof. of Psychiatry—Al-  
bert Einstein Col. of Med.  
"Psychosomatic aspects of surgery"

---

### SEMINAR ON THE VENEREAL DISEASES

Sponsored by:  
South Carolina Chapter of the  
American Academy of General Practice  
South Carolina Medical Association  
Columbia Medical Society  
South Carolina State Board of Health

APRIL 13, 1959  
HOTEL WADE HAMPTON  
HOTEL COLUMBIA

1. The Seminar will be held in Columbia.
2. It will take a physician away from his practice only one afternoon and evening.
3. It has been approved by the A.A.G.P. for five hours credit, Category I.
4. From the standpoint of authoritative presentations, most of our speakers are on a national level. Particular reference is made to our guest speaker of the evening, Dr. Evan Thomas, who is certainly the leading authority in this country and is both nationally and internationally known.
5. The program is designed to be of greatest assistance primarily to the private practitioner of medicine.
6. There will be no tuition or registration fees.

---

From Jessie Wilmore Murton:

### "DOCTOR OUT" (A Tribute)

The busy doctor whom we knew so well,  
And took for granted—as the night, or day—  
Has laid aside his stethoscope and lance,  
And closed the office door . . . and gone away.

The multitudinous concerns of life—  
The functions of the cell, and blood and breath—  
Recede before a weightier problem now,  
The ancient unsolved mystery of death.

Before this sudden new emergency  
Which he cannot dismiss, nor yet delay,  
The ready scalpel and the cunning hand  
Lie unresponsive to his will, today.

The body, and its intricate affairs—  
The myriad laws which compass it about—  
No longer are of interest . . . On Life's door  
Death's countersign reads briefly . . . *Doctor Out.*"

J. A. M. A. Feb. 11, 1950

---

## DEATHS

---

### DR. ORION T. FINKLEA

Dr. Orion Tiverton Finklea, 63, physician, civic and religious leader here, died February 7, after a brief illness at Florence.

He was stricken in the McLeod Infirmary with a heart attack while operating.

Dr. Finklea, a native of Hyman, was born November 11, 1895. He was a son of the late John B. and Martha Melissa Wise Finklea, pioneer citizens of Hyman.

Dr. Finklea received his premedical course at Furman University and later was graduated from the Medical College of South Carolina, in the class of 1918.

After graduation he served as a lieutenant in the U. S. Navy Medical Corps during World War I. In 1919 he came to Florence where he began his practice and became associated with the late Dr. F. H. McLeod and the McLeod Infirmary, of which he was a member of the staff. He was also a member of the staffs of the Saunders Memorial and Bruce hospitals. He served eight years as chairman of the Florence City School Board and two years as chairman of the South Carolina School Boards.

Dr. Finklea took post-graduate work in urology at the Johns Hopkins University and radiology at the University of Pennsylvania.

He was a member of the Florence County Medical Society; a member and past president of the Pee Dee Medical Assn.; a member of the South Carolina Medical Assn.; the Southeastern Section of American Urological Assn.; the American Urological Assn. and was a fellow of the American College of Surgeons.

---

### DR. STEWART SHERARD

Dr. Stewart Baskin Sherard, 78, of 100 S. Granard Street, died January 1, 1959 at his home following two years of declining health and three months of serious illness.

Dr. Sherard was a native of Iva and had practiced medicine since 1905. He had practiced in Gaffney since 1908. He was a member of the Limestone Presbyterian Church and was past president of the Rotary Club. He was a Mason, Shriner and was past president of the Crust Breakers. He also was past president of the Cherokee County Medical Society and was a member of the South Carolina Medical Association. He was owner and operator of Cherokee County Hospital until he sold it to the county in 1935.

Dr. Sherard was a surgeon having graduated from medical school of the University of Maryland. He practiced medicine in Columbia for one year and at Iva for two years before coming to Gaffney.

### DR. C. D. SMITH

Dr. Charlie Dorn Smith, 73, died unexpectedly at his home near Turbeville of an apparent heart attack recently.

---

## BOOK REVIEWS

---

*THEORY AND PROBLEMS OF CHILD DEVELOPMENT.* David P. Ausubel, M. D., Grune and Stratton, New York, 1958, 650 pp., \$11.75.

The author states that this book is intended as a reference work for educators, pediatricians, psychologists, psychiatrists, and social workers as well as an advanced textbook for graduate students in psychology. He deals with general principles underlying the regulation of development as a whole and more particularly with principles of personality development. An attempt has been made to incorporate empirical facts into a consistent and intergraded set of propositions which compose a substrate of developmental theory.

The progression of child development theory is first reviewed historically after which regulation of development and the nature of developmental processes are explored. Special chapters are devoted to prenatal and early development, personality development, and special aspects which include among others growth of intelligence and development of language.

An overview of general principles is provided in the first chapters and as more detailed information is introduced the previously presented concepts are re-introduced when they are relevant. This book deals with the basic sciences underlying child development problems but it does not make any attempt whatever to apply the principles to the practical problems of child rearing, child guidance, and etc.

This book should serve well its stated purpose of a reference source for specialists in child development but it will not meet the needs of the practitioner who seeks concise information relative to management of behavior disorders.

Gilbert F. Young, M. D.

---

*COUNTERFEIT-SEX; HOMOSEXUALITY, IMPOTENCE FRIGIDITY.* Edmund Bergler, M. D. 2nd Edition, 1958. New York, Grune & Stratton, Inc. \$6.50.

This book is one that has to be studied to appreciate what the author has to offer—it cannot be read casually or piecemeal. For this reason, and the more important one that psychoanalytic orientation and acceptance is necessary, "Counterfeit-Sex" will have a limited appeal to general members of the medical profession.

After the preface to the Second Edition was read, this reviewer felt that the objective, scientific attitude was in question because of the amount of space



given to "anti-Kinsey" comments. Statements such as the following gave rise to this initial question: "In the years which have elapsed since its original publication, one of the manifestations of 'counterfeit-sex' has become increasingly prominent. This manifestation is homosexuality, and its increased prevalence can be directly traced to Kinsey." Here again is an instance where a preface (especially to a later edition) might be embodied in the book proper, or added as a suffix.

The portions of the book which might prove to be more readily understood and accepted generally were those in which the 20 fallacies and misconceptions about "impotence" and the 20 concerning "frigidity" were stated and briefly discussed. The 20 questions asked in the initial interview in each of these two conditions seemed very pertinent—they might well be used by any physician who is interested in understanding and helping in these situations. (Why so many "20's"? Maybe it is a nice, round figure.)

The results obtained by psychoanalytic therapy in the experience of the author seemed very good, even when the factors of (1) voluntarily entering treatment, (2) continued treatment without interruption and for a sufficient period of time, and (3) depth of regression are considered. It would be interesting to know: in what percentage of all cases seen were these qualifications met and maintained?

This book was certainly provocative and, in spots, useful information was gleaned.

W. G. Morehouse, M. D.

---

*Peritoneo-Pericardial Diaphragmatic Hernia.* Karl M. Lippert (Columbia) Ann. Surg. 148:798 (Nov. 1958)

A peritoneo-pericardial diaphragmatic hernia is one in which there is a defect in the diaphragm through which the peritoneal and pericardial cavities communicate. The origin of this type of hernia may be congenital or traumatic. It is diagnosed with difficulty and is rarely differentiated from other diaphragmatic hernias. Definitive treatment of this condition is surgical via a thoracic approach. A case is reported in which there had apparently been an extensive tear in the diaphragm by indirect trauma and the patient received other multiple injuries consisting of a comminuted fracture of the pelvis, head injury, and a ruptured bladder. The diaphragmatic tear involved a portion of the left leaf of the diaphragm, the pericardial area and the right leaf of the diaphragm. Omentum, large and small intestine

and a portion of the liver were found to have encroached on the pericardial cavity. Surgical repair of the diaphragm was achieved after reduction of abdominal viscera. The postoperative recovery was uneventful. This case report is added to the 13 other similar cases found after careful search of the literature and an analysis of the cases is made.

K. M.

---

*Trends in Maternal and Child Health.* Hilla Sheriff, M. D. (Columbia) J. Am. Diet. A. 34:1304 (Dec. 1958)

Despite what has been done for maternal and child health in this country, there is a gap between what we are doing today and what needs to be done. We must do even more to keep pace with the changes that are occurring with breath-taking rapidity. What measures will be used to safeguard children in the future, or even what we must safeguard them against, no one can know.

For the immediate future we know that some of our current trends will be carried on, that some of our present knowledge will be of use, and that some of our wisdom can still be translated into action. "We are building on an age-old wisdom that recognizes the need of the child for his parents, and the security of a home to which he unquestionably belongs. Today we have new knowledge flowing from the social and biological sciences which helps guide us in the adjustment of conditions forced upon us and our children by all the modern ways of life.

"Each new generation brings its own problems—problems which require new approaches, new inventiveness, new counter measures, and above all new knowledge and greater skill on the part of adults."

The benefits for our children to be derived from the newer trends on which I have barely touched, as well as tired and true older trends, represent a real investment in the future of our country—indeed in the future of the world, for children *are* the future.

---

We are very much disturbed about the horses on television. We have neglected our work to watch Western after Western on TV. We have galloped through town after town in pursuit of the bad guys, through Main street after Main street.

We have never seen such clean streets, and we have seen not one responsible hokeypokey man. Is there something wrong with those horses?

Worcester Medical News





Patients receiving

# NILEVAR<sup>®</sup>

Eat more...

Feel better...

Recover faster

Compared to control patients, those receiving Nilevar (brand of norethandrolone) have repeatedly demonstrated more rapid and more complete recovery from serious acute illness and increased comfort and well-being in chronic illness.

A multitude of case histories are now adding individual clinical color to the earlier controlled investigations which defined the actions of Nilevar as an effective aid in reversing negative nitrogen balance and in building protein tissue.

In typical case reports such gratifying comments as these appear:

**Underweight** — "Appetite considerably increased within one week. Sense of well-being and vigor increased along with increased appetite."

**Prematurity** (Birth weight: 2 pounds, 4 ounces) — "Gradual improvement in appetite and capacity for formula. . . . Excellent progress and weight gain for a very immature infant."

**Carcinoma of the Uterus** — "Within four days appetite became excellent, took full diet. . . . More ambition while on Nilevar. Enjoys life. Takes part in church and other social affairs."

**Third Degree Burn** — ". . . soon began eating all that was offered. . . . Began to show signs of hope for recovery. . . . Perhaps one of the greatest changes was in the appearance of his wounds which were so very much improved."

The dosage for adults is 20 to 30 mg. daily in single courses no longer than three months. For children the daily dosage is 0.5 mg. per kilogram of body weight, in single courses no longer than three months.

Nilevar is supplied in tablets of 10 mg., ampuls of 25 mg. (1 cc.) and Nilevar Drops of 0.25 mg. per drop.

---

G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

**SEARLE**

### GREENVILLE POST-GRADUATE SEMINAR

The annual Greenville Post-Graduate Seminar will be held on April 14, 15 and 16 of 1959. The speakers which will be heard on this program will include

1. Dr. Edgar Hull, Professor of Medicine at L. S. U., New Orleans
2. Dr. Peter Gazes, Department of Medicine, Medical College of South Carolina, Charleston
3. Dr. Claude Frazier, Asheville, North Carolina
4. Dr. Benjamin Manchester, George Washington University, Washington, D. C.
5. Dr. Edwin Boyle, Medical College of South Carolina, Charleston
6. Dr. Bob Bowman, Johnson City, Tennessee
7. Dr. J. Lamar Calloway, Duke University, Durham, North Carolina
8. Dr. John Parks, Dean of George Washington University, Washington, D. C.
9. Dr. Fred Kredel, Medical College of South Carolina, Charleston
10. Dr. R. A. (Daddy) Ross, University of North Carolina Medical School, Chapel Hill, North Carolina
11. Dr. R. A. Greenblatt, University of Georgia, Augusta, Georgia
12. Dr. Arthur Siegling, Medical College of South Carolina, Charleston
13. Dr. John Cuttino, Medical College of South Carolina, Charleston



**National Society for Crippled Children and Adults**  
2023 W. Ogden Ave., Chicago 12, Ill.



# The Journal

of the

## South Carolina Medical Association

VOLUME LV

April, 1959

NUMBER 4

## OBSERVATIONS ON PORTAL HYPERTENSION\*

NATHAN A. WOMACK, M. D.  
Chapel Hill, N. C.

The classical and generally accepted concept of the cause of esophageal varices is one related to the development of a collateral circulation in the lower part of the esophagus and the upper part of the stomach. This comes about as a result of a lesion generally within the liver, although it is occasionally seen with no demonstrable lesion in the liver. The origin of these collaterals is considered to be the result of fibrosis of the liver with compression of the vascular bed and the development of increased tension within the portal vein, leading to dilatation of the veins. These varices cannot stand this increased portal pressure, and rupture. This seems to be a straightforward and satisfactory explanation of the lesion until one begins to break it down in terms of critical experience. Then, I think, the validity of this concept becomes questionable.

Let us examine first the evidence of occlusion of the portal bed within the liver from fibrous tissue contraction. Examinations of the liver with cirrhosis reveals the reverse. One sees dilated portal channels, not constricted portal channels. Neither is there evidence of occlusion of the hepatic venous circulation, the central veins being open. (Fig. 1) Again, we often see varices in patients in whom there is

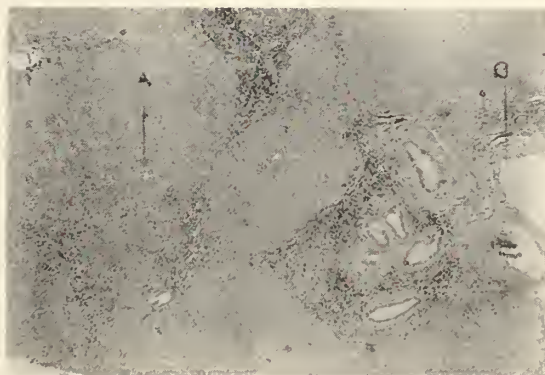


Figure 1

*Microscopic view of liver in patient with cirrhosis and episodes of massive bleeding—Note the patent central veins and the enlarged portal veins.*

no demonstrable fibrosis to any great extent. Banti's syndrome is a beautiful example of this in which the liver has little or no scarring early in the development of the syndrome, and yet varices and splenomegaly are prominent. (Fig. 2) This has been explained by some as resulting from extrahepatic obstruction. We ourselves have had difficulty in demonstrating this observation as have others. It has too often been assumed to be present. We also are familiar with the fact that one will encounter sometimes a liver that is half its normal size due to tremendous scarring, and yet there will be no varices. We will also see a liver that is almost completely involved in cancer with marked distortion of vascular relationships, and yet there will be no varices.

If one perfuses the liver with radiopaque material, it is interesting to note that the nor-

\*Presented before the annual meeting of the South Carolina Medical Association, May, 1958.

From the Department of Surgery, University of North Carolina School of Medicine; and the North Carolina Memorial Hospital, Chapel Hill, North Carolina.

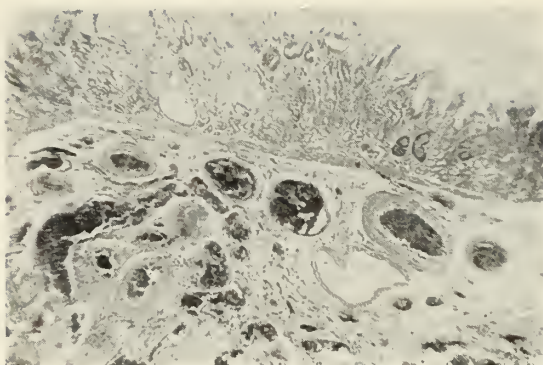


Figure 2

*Focal area of vascular abnormality resembling angioma in fundus of the stomach of a patient the victim of numerous episodes of massive bleeding. The liver showed minimal evidence of damage.*

mal liver is to a large extent diffusely perfused, but the cirrhotic liver is not. In the latter, the blood goes through the central vascular mechanism, with the periphery getting only a small amount. In cirrhosis the clearance is rapid. This is not in keeping with what one would anticipate from a contracted liver.

Again, if one occludes the portal vein experimentally, splenomegaly, which is almost a constant finding when there are esophageal varices, does not develop. One gets an initial acute splenomegaly, which adjusts itself and eventually reverts to normal size or even undergoes atrophy. Such obstruction of the portal vein also never results in the development of varices of the esophagus. In those rare instances in which we have removed the right lobe of the liver (we have had two experiences with this), there is no development of varices at all, and yet one would anticipate that this would be a common occurrence. Lack of correlation between occlusion of the portal vein and splenomegaly with varices has been documented many times clinically. This is also supported by several experimental studies. Indeed there seems to be but little evidence to support the fact that splenomegaly or esophageal varices can result exclusively from congestive hyperemia. This subject has been reviewed by Ravenna.<sup>7</sup>

There is another finding which I have noticed on several occasions—a thrill in the splenic vein with rarely a bruit over the spleen. Such is usually associated with a tortuous splenic artery and suggests an in-

crease in blood flow. This is not a picture that can be explained by obstruction of the portal vein. One should not get such a thrill, nor should there be tortuosity and dilatation of the splenic artery.

Let us now examine the phenomenon of portal hypertension. Portal hypertension is an inconstant thing. To begin with, determining portal venous pressure at the operating table with a water manometer is extremely crude. To insert a needle or cannula into a portal vein with intra-abdominal pressures altered by an open abdomen, often with a patient critically ill may give readings subject to wide variation. The base line for the manometer is often difficult to establish. Variations of as much as ten centimeters may occur quite easily. Where such determinations have been made carefully and with a strain gauge manometer, they are more accurate. Taylor<sup>8, 9</sup> has done this on normal people as well as on those with cirrhosis, leaving a polyethylene cannula in the portal vein for as long as a week. He reports that the normal portal pressure will extend from 10 to 30 cm. of water and the pressure in the portal vein in people with cirrhosis of the liver is usually about 20 to 40 cm., overlapping the normal quite a bit. He has noticed also the fact that the Valsalva maneuver will alter portal pressures considerably. The strain of getting out of bed will often increase the portal pressure to 60 cm. of water, higher than is observed with cirrhosis. Indeed, it will be recalled that the patients who bleed with cirrhosis don't bleed following exertion as a rule. It is not coughing or sneezing that produces this hemorrhage.

The portal vein is extremely sensitive to intra-abdominal pressure. Pressure on the spleen will increase the intraportal pressure considerably as will pressure on the abdomen. We have noted that distending the stomach with air will produce a 100 per cent rise in portal pressure. One can produce equally as great a rise in portal pressure with epinephrine and to a lesser extent with histamine. To think then of portal hypertension as related only to portal venous obstruction is an over-simplification of our problem.

Finally, let us examine the mechanism of the production of varices. These are not al-



ways present whenever portal hypertension exists, and, indeed, there seems to be but little relationship to the degree of pressure in the portal vein and the presence of varices. When such varices are present with portal hypertension, they are usually limited to the lower part of the esophagus and upper part of the stomach. On esophagoscopic examination, they may be noted at times to disappear, only to reappear at a later date. The veins in the omentum, or the small intestine, carrying the identical pressures do not become varicose. The phenomenon therefore of diffuse pressure affecting the veins only in one limited area of the body is difficult to explain on the basis of pressures alone. Again, if this increase in pressure was due primarily to obstruction, one would anticipate that the back pressure would be in the veins in the subserosal area as well as those in the submucosa. Varicosities however that bleed are in the submucosa. Intra-peritoneal hemorrhage from their rupture is rare. (Fig. 3a and 3b)

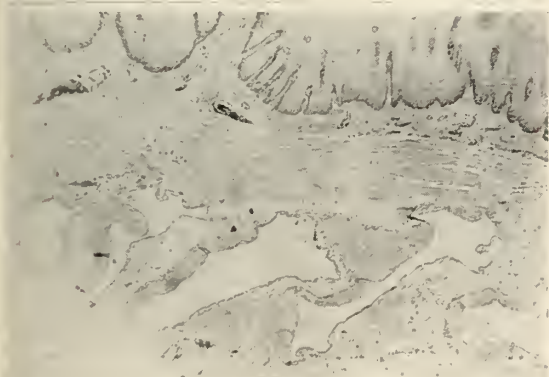


Figure 3a

*Vascular network in the submucosa of the esophagus shown in Fig. 4a. Note the eccentricity of the muscular layer in the wall of the tortuous vessel.*

There is also a lack of edema. Were this purely an obstructive phenomenon there would be chronic passive congestion and edema in the entire gastrointestinal tract. When one ligates the inferior vena cava and there is a rise in venous pressure, there is also edema. When the edema disappears following vena cava ligation, the rise in pressure disappears. We never see edema in the stomach wall with varices from portal cirrhosis. Indeed, with the peritoneal cavity distended by ascites, one is impressed by the fact that there is no

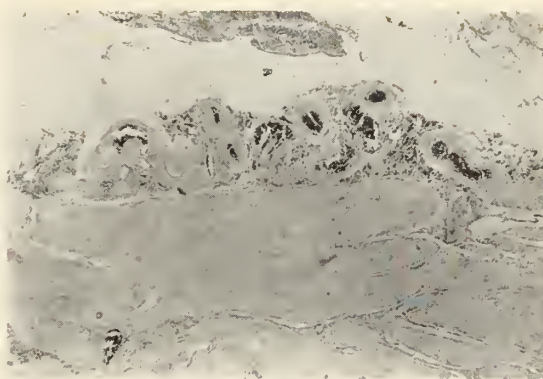


Figure 3b

*Adventitia of the wall of the esophagus shown in Fig. 4a. Compare the vascular pattern with that in Fig. 3a. Such is hardly likely due to central venous obstruction.*

edema in the intestinal walls that can be noted.

Hemorrhage from increased intraluminal pressure alone appears improbable. I mentioned a moment ago that sudden increases in pressure three times the level that one may see in far advanced cirrhosis do not produce hemorrhage. The vascular walls of these veins when examined are entirely too thick to be ruptured by such a pressure as 30 cm. of water. Furthermore, when we look at the area from which the hemorrhage has occurred, it is common experience to find a peptic ulcer.<sup>3</sup> (Fig. 4a and 4b) We know that cirrhosis is associated with peptic ulceration in a huge number of instances.

The type of hemorrhage that occurs from patients with varices is often huge and impressive. The blood is red; it does not resemble venous blood; this is hemorrhage that is not easily stopped with a pressure of thirty centimeters of water—it takes more than that. The bleeding then impresses one as arterial entirely. With this idea in view, it occurred to Dr. Richard Peters and myself that it might be worthwhile to examine the blood from such varicosities to determine if it was arterial. In three such patients in whom we studied the oxygen saturation of the blood in the esophageal branches going to the hemi-azygos vein, we found that it was arterial—arterial to the extent that the saturation was between 90 and 92 per cent in all three of these patients, while the arterial saturation was 95 per cent. In patients without liver disease, we





Figure 4a

*Large ulcer at the junction of the esophageal and gastric mucosa. This was the site of hemorrhage in a patient with cirrhosis of the liver dying from bleeding.*

have found the hemiazygous saturation to be between 60 and 65 per cent. Inferior vena cava saturation was in the sixties. Actually, therefore, we are dealing with arterial blood in these veins. We have found that a similar situation exists in the blood in the portal vein; however, normally the blood in the portal vein is more highly saturated than that in most systemic veins, being 30 per cent higher than the saturation in the inferior vena cava at a point below the entrance to the renal vein.

These observations pose certain questions that need to be answered. The first of these that concerned Dr. Peters and myself<sup>13</sup> was the explanation of the high degree of saturation of the venous blood encountered in the portal circulation under normal circumstances. Immediately three possible mechanisms suggested themselves. One was that there was a decreased demand for oxygen by the

parenchymal cells in the portal areas. Focusing our attention on the stomach, we quickly found that this could not be the explanation. Venous blood coming from the stomach was studied and was found to be highly saturated as was the blood in the portal vein. The stomach however requires a considerable amount of oxygen for its work. There is probably no cell in the body that requires more energy than does the gastric parietal cell. It has been estimated that 1,550 calories are required to produce a liter of gastric juice with a pH of 1.0. There can therefore be no decrease in oxygen consumption when the stomach is functioning.

Another possibility resides in a particularly rich and rapid capillary flow with the result that relatively little oxygen is withdrawn. Such a situation exists in the kidney. We therefore set up an experiment designed to decrease the



Figure 4b

*Photomicrograph of base of the ulcer shown in Fig. 4a demonstrating the three layers of degeneration and repair typical of peptic ulcers.*

rate of capillary flow. This was done by partially occluding the venous drainage from the stomach with resulting back-pressure in the capillary bed and a reduced rate of capillary flow. We found that there was little change in the portal vein oxygen saturation when such was done. This held true even when the portal vein was completely occluded temporarily. The saturation in the vena cava below the entrance of the renal veins however showed a precipitous drop, saturation levels as low as 37 per cent being obtained, the normal being 60. At such times there was a drop in arterial pressure and the animal went into shock. We have noted such acute episodes of hypotension

at the operating table when the portal vein was momentarily compressed while performing pancreatectomy.

By a process of exclusion we came to the necessity of utilizing the presence of a direct arteriovenous communication to explain the presence of highly saturated venous blood draining from the stomach and perhaps the other abdominal viscera as well. A deductive concept however is not adequate, for it is apparent that such communications must be demonstrated for us to justify a belief in their existence. Studies by others relating to arteriovenous anastomoses in the stomach are on record. Most of these are fairly recent. Watzka<sup>12</sup> described such structures with muscular sphincters in the gastric submucosa in 1936. In 1948 de Busseher<sup>5</sup> by using injection methods as well as serial section reconstructions demonstrated these structures well. Besides the large anastomoses in the submucosa of the stomach, he describes also a glomus-like mechanism in vessels of smaller diameter with epithelioid cells. Adapting the method of micro-arteriography, Barclay and Bentley<sup>1</sup> perfused stomachs removed at autopsy as well as portions of stomachs removed surgically for ulcer. They noted that in the latter specimens it was difficult to visualize adequately the mucosal vessels, while the autopsy specimens showed this vascular grouping fairly distinctly. In one instance they noted that venous blood removed from the gastric vein immediately upon opening the abdomen, had a much lower oxygen content than did blood removed from the same vein a few minutes later. From these observations they deduced that there existed a shunting mechanism in the submucosa of the stomach fairly sensitive to environmental factors.

Using a double colored injection technique, Barlow<sup>2</sup> demonstrated clearly anastomotic channels between the arteries and veins in the submucosa of the human stomach of a direct type never smaller than 30 microns in diameter. Some as large as 60 microns in diameter were noted.

Walder<sup>10, 11</sup> performed perfusion experiments devised to measure the diameter of these anastomoses. This was done by placing glass beads of varying sizes in his perfusate,

injecting them into the arteries of the human stomach and collecting the beads as they came from the veins. Portions of stomach removed at operation for ulcer were so perfused and the beads ranged from 40 to 200 microns in diameter. The largest beads that he was able to perfuse through the stomach were 140 microns in diameter. When the stomach was perfused with epinephrine, the flow through these arteriovenous connections seemed to be increased. On the other hand following perfusion with histamine there seemed to be a decrease in flow through these pathways. From these experiments it is impossible to determine the extent to which blood flow was dependent upon the opening and closing of a sphincteric mechanism at the arteriovenous junction or variation in the resistance offered by the gastric capillary bed. In a later study the same author offered evidence that this mechanism was probably one of a variation in capillary resistance rather than alteration in the shunt control.

In pursuit of our problem, more information was necessary to correlate the distribution of blood flow and gastric function as well as some of the factors that relate to the dynamics of this blood flow. The function of the stomach that lent itself most easily to such a study was that of acid secretion, and the animal that was easily available that most resembled the human both in function and blood supply was the dog.

Our first group of studies was related to morphology of the vascular bed. The details of our technique are published elsewhere.<sup>6</sup> Rice starch granules 4 to 5 microns in diameter were suspended in a gelatin solution with the viscosity at body temperature of plasma. Because of the rigidity of these granules and their tendency to adhere to each other, our experience has been that they will not pass through a capillary bed the vessels of which are less than 10 microns in diameter. We were thus able to study the precapillary vasculature following arterial injection of the stomach after which particular areas were sectioned and stained with Lugol's solution. In order to visualize the finer capillaries a suspension of India ink in physiologic salt solution was substituted for the starch-gelatin mixture.



When the dog stomach was perfused with histamine and subsequently a mixture of rice starch granules in gelatin solution was injected into the left gastric artery, the main arterioles to the villi could be well demonstrated. When India ink perfusion was used following histamine the finer capillary bed became apparent. In corollary observations on the intact animal with a similar perfusion of histamine, there was noted an increase in acid secretion by the stomach, an increase in portal venous pressure and splenic venous pressure with no appreciable alteration in the oxygen saturation in these veins.

When a similar experiment was carried out perfusing the stomach with epinephrine, instead of histamine, it was noted that there was scant visualization of the blood supply to the mucosa. The submucosal vascular plexus however was noted to be larger and with the starch preparation actual arteriovenous anastomoses could be visualized with a connecting lumen as wide as 125 microns. Following epinephrine perfusion there was a decrease secretion of acid by the stomach while the pressure in the portal and splenic veins was doubled. The oxygen saturation of the blood in these veins was arterial in type.

In another group of experiments small glass beads were perfused through the dog's stomach immediately after the animal was sacrificed. In the histamine preparation it was rare to find beads appearing in the vein as large as 25 microns in diameter, while in the epinephrine-perfused stomach such beads were obtained that were 125 microns in diameter. Since beads of this latter size could not have passed through a capillary bed, it must be assumed that they passed through arteriovenous communications.

These findings demonstrate definitely the presence of arteriovenous anastomoses in the stomach. It is likely that with varied patterns they exist elsewhere in the gastrointestinal tract. The function of these vascular connections seems to be related to the phasic utilization of energy by these digestive organs. Such a dual blood flow makes it possible for

cells to receive an adequate amount of blood when energy is needed and to have this blood shunted for use in other parts of the body when these cells are not functioning.

It is interesting that the pressures in the portal vein are not constant during these periods of alterations in mucosal vascular response. Indeed following the administration of epinephrine the pressure in the portal vein rose to a level commonly seen in cirrhosis with varices. Bearn *et al*<sup>4</sup> have shown that epinephrine causes the liver blood flow to be doubled and therefore the rise in pressure noted by us is probably related to a change in flow.

The exact mechanism of the histamine and epinephrine action cannot be deducted from our observation and in all probability there are other substances having vascular effects besides these two. The mechanism seems to be a humoral one and one could easily speculate that adequate hepatic function is necessary in maintaining a proper balance insofar as these substances that regulate the vascular pattern and visceral blood flow are concerned. Damage to the liver of a chronic nature could easily produce both physiologic and morphologic alterations in the vascular pattern through a humoral mechanism. Speculation however is not justifiable and much more work needs to be done before we have our answer.

It seems apparent that the vascular dilatation in the lower part of the esophagus and upper part of the stomach, the peptic ulceration and the splenomegaly so often seen in patients with liver disease cannot be explained on the basis of portal vein occlusion with chronic passive congestion. It is much more likely that these result from increased blood flow through arteriovenous shunts normally present, with subsequent vascular dilatation and erosion of the esophageal and gastric epithelium from ensuing epithelial ischemia and peptic digestion. That hepatic damage plays a part in this derangement, there seems to be considerable suggestion. It is probable however that this damage presents its effect in a functional rather than an obstructive manner.



## REFERENCES

1. Barclay, A. E. and Bentley, F. H.: The vascularisation of the human stomach—a preliminary note on the shunting effect of trauma. *Brit. J. Radiol.* 22:62, 1949.
2. Barlow, T. E.: Arterio-venous anastomoses in the human stomach. *J. Anat.* 85:1, 1951.
3. Baronofsky, I. D.: Portal hypertension. *Surgery* 25:135, 1949.
4. Bearn, A. G., Billing, B. and Sherlock, S.: The effect of adrenaline and noradrenaline on hepatic blood flow and splanchnic carbohydrate metabolism in man. *J. Physiol.* 115:430, 1951.
5. de Busscher, G.: Les anastomoses artério-veineuses de l'estomac. *Acta Neer. Morphologica Norm. et Path.* 6:87, 1948.
6. Peters, R. M. and Womack, N. A.: Hemodynamics of gastric secretion. *Ann. Surg.* 148:537, 1948.
7. Ravenna, P.: Splenoportal venous obstruction without splenomegaly. *Arch. Int. Med.* 72:786, 1943.
8. Taylor, F. W.: Portal tension and its dependence on external pressure. *Ann. Surg.* 140:652, 1954.
9. Taylor, F. W.: Experimental portal hypertension. *Trans. Am. S. A.* 75:379, 1957.
10. Walder, D. N.: Arteriovenous anastomoses of the human stomach. *Clin. Sc.* 11:59, 1952.
11. Walder, D. N.: Some observations on the blood flow of the human stomach. *Visceral Circulation (Ciba Foundation Symposium)*, Boston, Little, Brown and Co., 1953, p. 210.
12. Watzka, M.: Über Gefäßsperrern und arteriovenöse Anastomosen. *Ztschr. für Mikro.—anat. Forsch.* 39:521, 1936.
13. Womack, N. A. and Peters, R. M.: An investigation of the relationship between portal venous pressure and inferior vena caval and portal venous oxygen saturations. *Ann. Surg.* 146:691, 1957.

# THE ANTICOAGULANT SINTROM (ACENOCOUMARIN) IN CORONARY ARTERY DISEASE

## CLINICAL EXPERIENCE

CARL H. STROM, M. D., WILLIAM N. COCHRAN, M. D. AND R. S. POLLITZER, M. D.  
Spartanburg, S. C.

The anticoagulant Dicumarol (bishydroxycoumarin), was first used clinically 16 years ago. Since this time, the use of anticoagulants has become a generally accepted therapeutic procedure in the treatment of certain cardiovascular diseases. The use of these drugs is complicated by several factors, mainly bleeding, which necessitate a very close control over any therapeutic program in which these drugs are used. Consequently, several different drugs have been developed in the search for an ideal anticoagulant.<sup>1, 2, 3</sup>

The following are considered the most important qualities that a drug of this type should possess: (1) Rapid lowering of the activity of the prothrombin complex to a therapeutic range; (2) Maintenance of its effect long enough to prevent fluctuation of the prothrombin level when the drug is administered in single daily doses; (3) Excretion or elimination rapid enough to permit a speedy recovery of the prothrombin complex on cessation of therapy; (4) Ability to be rapidly counteracted by the administration of a suitable pharmacological antagonist; (5) Relative constancy of dose from patient to patient and in any given patient; (6) Effectiveness when

given orally; (7) Lack of toxicity and Good toleration in therapeutic dosages.<sup>4</sup>

At present, two types of anticoagulant drugs exist. The injectable group, typified by heparin sodium, acts rapidly to lengthen the clotting time by interfering with the action of thromboplastin and thrombin, and is excreted in the urine. The oral group is typified by coumarin and indanedione substances which prolong the prothrombin time.<sup>5</sup> Some of these products now available are Dicumarol, Tromexan (ethylbiscoumacetate), Compound 63, Cyclocumarol, and Sintrom.

### Material and Methods

It is the purpose of this paper to report our clinical experience with Sintrom in ten patients with coronary artery disease. All of these patients complained of chest pain, exhibited electrocardiographic changes compatible with myocardial infarction, and with two exceptions, all showed an elevated sedimentation rate. And, with three exceptions, all showed significantly elevated serum transaminase. Prothrombin time determinations were done each morning by the plasma dilution method. A brief summary of the ten cases is given in the appended table, and two illustrative cases are presented in detail.

No.	Age	Initials	Sex	History	Physical Findings	Sed. Rate	W.B.C.	Maximum Serum Transaminase	E.C.G.
1.	56	E.E.T.	M	Pain in rt. jaw, neck, both arms and later, constricting chest pain.	Regular rhythm, forceful tones.	28	14,500	17	T-wave changes with ment elevation V <sub>4</sub> .
2.	61	J.R.B.	M	Burning, pressing, retroxiphoid pain with left arm radiation.	Tones of fairly good quality.	36	15,300	216	QRS and ST changes compatible with acute infarction.
3.	65	D.A.S.	M	Retrosternal pain radiating to left shoulder.	Heart sounds distant. Occasional extra systoles.	38	10,150	110	ST changes indicating posterior infarction.
4.	56	R.L.T.	M	Squeezing pain in chest.	Distant heart sounds. Rate 120.	36	8,200	90	RS, ST, and T wave suggestive of an anterior infarction.
5.	75	J.W.M.	M	Very severe precordial pain with radiation to both arms and jaws.	Heart tones very distant.	--	14,200	138	QRS, ST, and T wave compatible with acute lateral process.
6.	47	G.W.S.	M	Soreness in anterior chest.	Rapid rate, regular rhythm.	34	11,050	36	QRS, ST, and T wave indicative of acute septal infarction.
7.	67	C.M.P.	F	Precordial pain radiating to both shoulders and arms.	Distant heart tones.	38	11,550	133	QRS, ST, and T wave indicating posterior acute.
8.	60	M.M.		Severe chest pain radiating to neck.	Poor quality heart tones, slow rate, irregular rhythm.	9	20,900	216	ST and T wave indicating acute anterior process.
9.	42	F.B.		"Indigestion" followed by chest pain radiating to both arms.	Heart tones of good quality.	36	5,500	84	QRS, ST and T wave suggestive of acute infarction.
10.	79	M.B.		Severe crushing precordial pain.	Distant heart sounds.	36	9,700	36	AV block with ST changes compatible with cardiac disease.

Sintrom, 3 (alpha acetonyl-4 nitro benzyl)-4-hydroxy coumarin, is a white, tasteless, odorless, anticoagulant available in 4 mg. scored tablets. Its action primarily and initially is to depress factor VII, and in lesser degree, prothrombin. After several weeks, both are affected equally.<sup>4</sup> The drug is excreted in unaltered form.

Dosage was determined on the basis of the daily prothrombin time reports. In four patients, therapy was initiated by 200 mg. Depo-Heparin followed by 20 mg. of Sintrom in divided doses of 10 mg. all given over a period of 12 hours. Three patients were started directly on 20 mg. Sintrom, two received an initial dose of 12 mg., and one who had been on the anticoagulant Hiedulin (phenindione) on an out-patient basis, was switched to Sintrom with an initial dose of 4 mg. All patients were

treated in the hospital and four were maintained on the drug on an out-patient basis.

#### *Illustrative Cases*

Mr. J. R. B., a 61 year old white male, was in good health until the day before admission, when he developed a sudden retroxiphoid pain. He had just eaten, and dismissed this pain as "indigestion". The following day, the patient "strangled" while drinking a carbonated drink and lost consciousness for about five minutes. Associated with this, there was again a pain in the retroxiphoid area which was now very severe and which persisted after he regained consciousness. The pain tended to radiate down the left arm.

He was a well developed, but somewhat thin white male who appeared to be in pain. There was a somewhat ashen color and the patient was sweating, but not profusely. The heart was not enlarged to percussion and there was no murmur or thrill. Rhythm was regular, although rather slow—61 per minute; blood pressure 170/95. A few rales were heard in the base of the left lung posteriorly; otherwise, the lungs

Avg. Daily Maintenance Dose	Dose Range	Total No. Days Drug Given.		Results	Remarks
		Hosp.	Out-Pt.		
6.9 mg.	2-8 mg.	30	14	Improved	Anticoagulant treatment begun 6 hours after onset of symptoms with 200 mg. Depo-Heparin.
6.7 mg.	2-10 mg.	18	16	Improved	Anticoagulant therapy begun 30 hours after symptoms with 200 mg. Depo-Heparin.
3.7 mg.	0-6 mg.	26		Improved	Patient had extension of infarction after 17 days on anticoagulants. Anticoagulants begun 3 days after onset of symptoms. Only Sintrom used.
1.9 mg.	0-6 mg.	22		Improved	Patient admitted in acidosis with evidence of infarction. Previous infarction 5 yrs. Was on anticoagulant Hedulin for thrombophlebitis when admitted. Anticoagulant regulation difficult.
2.0 mg.	2 mg.	4		Expired	200 mg. Depo-Heparin given to begin anticoagulation approximately 10 days after symptoms.
4.7 mg.	4-6 mg.	6	8	Improved	
3.5 mg.	0-6 mg.	26	19	Improved	Anticoagulant therapy begun day after onset of symptoms with 200 mg. Depo-Heparin.
.8 mg.	0-4 mg.	20		Expired	Anticoagulant therapy began approximately 30 hours after symptoms. Very minimal dosage required to maintain desired prothrombin levels.
3.2 mg.	2-4 mg.	19		Improved	100 mg. Heparin given to initiate anticoagulant therapy 6 hours after symptoms.
1.7 mg.	0-8 mg.	23		Improved	Anticoagulants started three weeks after first onset of symptoms.

were clear. There was a slight abdominal distention. Neurological examination showed slightly hyperactive reflexes bilaterally. There was also a questionable Babinski reflex on the right.

The leukocyte count was 15,800 cu. mm. with 1% stab forms, 77% segmented cells, 21% lymphocytes and 1% monocytes. There were many leucocytes and a trace of albumin in the urine. Blood sugar was 136 mg. per 100 ml. and nonprotein nitrogen 35.8 mg. Corrected sedimentation rate was 36% and serum transaminase rose to 216 units. A chest roentgenogram showed no abnormality of chest structures. An electrocardiogram was abnormal in respect to QRS and ST changes compatible with an acute posterior septal process interpreted as most likely due to an infarction.

Approximately 30 hours after the onset of symptoms, Mr. B. was given 200 mg. of Depo-Heparin and 10 mg. of Sintrom. Another 10 mg. of Sintrom was given in two hours. Determination of the prothrombin time the following morning (approximately 18 hours) was about 50% as compared with the control. All subsequent prothrombin determinations were on an

essentially therapeutic level—the desired level being between 20% and 30% of the control. The drug was given for 18 days while the patient was in the hospital and for 16 days on an out-patient basis. The daily dose required to maintain the desired prothrombin concentrations varied between 2 and 10 mg. The average daily maintenance dose was 6.7 mg. Near the end of his hospital stay, it became possible to maintain the desired concentration with determinations every two or three days. The required daily dosage became increasingly stable as the patient remained on the drug.

Other therapeutic measures included oxygen, Demerol (meperidine), Peritrate (pentaerythritol tetranitrate) and quinidine. Also, as the patient was found to be mildly diabetic, he was placed on a low salt, low cholesterol, diabetic diet, and Orinase (tolbutamide). Mr. B. was discharged symptom-free 18 days after admission with a schedule allowing progressive ambulation. He has done well since discharge, and he has been easily controlled for 16 days on Sintrom as an out-patient.



The second case is that of Mrs. C. P., a 67 year old white female. On the day prior to admission, while walking, she developed a crushing pain in the precordial region which radiated to both shoulders and down both arms. Several hours later, she noticed some irregularity in her pulse. She was awakened from sleep that night by a recurrence of the same type pain. This pain persisted, and about eight hours later, she agreed to hospitalization as the pain was still present. She also became nauseated several hours before hospital admission.

She was a well developed, well nourished, white female who appeared to be apprehensive and in pain. Her skin had a pale, pasty appearance, as if there were a little fluid retention, and there was hirsutism of the upper lip. Grade 1 fundi were observed. Her lungs were clear and resonant to percussion and auscultation. Examination of the heart revealed distant heart sounds. No murmurs were heard, and on admission, the rate was 56 per minute and regular. Extrasystoles, however, had been detected several hours prior to admission. Blood pressure was 90/50. On examination of the abdomen, the liver was felt 2 cm. below the costal margin, and a questionable right femoral hernia was noted.

The leukocyte count was 11,550 cu. mm. with 2% stab forms, 86% segmented forms, 11% lymphocytes, and 1% monocytes. Corrected sedimentation rate was 38 mm. per hour. Maximum serum transaminase was 133 units. Electrocardiographic tracing was abnormal in respect to ST, QRS, and T wave changes compatible with myocardial disease and indicative of an acute posterior myocardial infarction.

An initial dose of 20 mg. Sintrom given over a six hour period in two 10 mg. doses combined with 200 mg. Depo-Heparin was given shortly after admission. This reduced prothrombin concentration to approximately 50%. Thereafter, the patient was kept at a therapeutic level with daily doses of Sintrom ranging from 0 to 6 mg. daily. Regulation of dosage was again determined by daily prothrombin times and an ideal concentration between 20% and 30% of control sought.<sup>6</sup> The average daily maintenance dose was 3.5 mg. The patient was on the drug for 26 days while in the hospital and for the first 19 days after discharge from the hospital. No complications were encountered. Again, it was noted that the daily dosage requirement was more consistent and predictable after the patient had been on the drug for a week or more. Other treatment received by Mrs. P. included Demerol, oxygen, Dramamine (dimenhydrinate), and Doriden (glutethimide). She was discharged from the hospital asymptomatic and has done well to date on a program which allows a progressive return to normal activity.

#### *Discussion*

The ten patients included in this study were all thought to have had a myocardial infarction. Clinically, the diagnosis in each case was satisfactorily established. A part of the thera-

peutic program employed with these patients consisted of anticoagulation achieved with the relatively new oral anticoagulant, Sintrom. In most cases, 20 mg. were used as an initial dose and thereafter, the dosage was adjusted according to the daily prothrombin time determinations. By the second or third day, adequate prothrombin concentrations were reached in all cases. Individual regulation, in most instances, was without difficulty.

Two patients, R. L. T. and M. M., were difficult to regulate. Interestingly, R. L. T. was a diabetic who was admitted to the hospital in mild acidosis with co-existing symptoms and findings of a coronary thrombosis. At the time of admission, he was on the anticoagulant, Hedulin, (on an out-patient basis) which was being given in treatment of a chronic thrombophlebitis. This patient was put on Sintrom with an initial dose of 4 mg. His response to the drug was entirely unpredictable and unsatisfactory and the drug was discontinued just prior to his discharge. With M. M., the problem was one of too great a response to even a small dose of the drug. The average daily maintenance dose for this patient was found to be 0.8 mg.

With the exception of these patients, and two who expired, the overall results with the drug were gratifying. In no case was more than one daily dose of the drug necessary. The average daily maintenance dose ranged from .8 mg. to 6.9 mg. (as shown in the table), and the individual dose range in six cases varied as much as 6 mg. The dose range, however, is deceptive as in all of these cases, except the two mentioned earlier, it was usually constant. Occasionally, however, even in the well-regulated patient, an unexpected and unexplained high or low value in the prothrombin time would occur. Again, with the two above exceptions, a reasonably accurate daily maintenance dose could be established after the patient had been on the drug from four to seven days.

Two of the patients, J. W. M. and M. M. expired. Autopsy on J. W. M. revealed coronary atherosclerosis, and a massive, organizing myocardial infarction. Anticoagulant therapy was not started on this man until approximately ten days after the onset of symptoms. Post

mortem examination on M. M. disclosed a massive left ventricular infarction with pericarditis.

### Summary

Ten patients with the clinical diagnosis of myocardial infarction were treated with the new oral anticoagulant Sintrom. The usual initial dose, 20 mg., was given concomitantly with 200 mg. of Depo-Heparin. Thereafter, dosage was determined by prothrombin time values. Therapeutic ranges were achieved by the third day in all cases.

While the average maintenance dose from person to person showed a wide variation, the individual dose, with two exceptions, was reasonably constant after four to seven days on the drug with one daily dose.

Difficulty in anticipating therapeutic levels was minimal. The drug was found to be effective in small doses. No hemorrhagic or other toxic phenomena were encountered.

### REFERENCES

1. Schilling, F. J., Kruesi, O. R.: Clinical evaluation of Acenocoumarin, a new 4-hydroxycoumarin anticoagulant, *Am. J. M. Sc.* 231, 558, May 1956.
2. Weiner, M., Jiminez, M., and Katzka, I.: An evaluation of a new anticoagulant, Acenocoumarin (Sintrom); *Circulation* 13:400, 1956.
3. Pollitzer, R. S., Ethyl biscoumacetate (Tromexan) in coronary artery disease, *J. South Carolina M. A.*, 56, June 15, 1956.
4. Neill, E. C., Moon, R. Y., Vander Veer, J. B.: Clinical evaluation of a new oral anticoagulant "Sintrom", *Circulation* 15:713, May 1957.
5. Pratt, G. H., Clinical experience with a new antithrombotic substance, *New York State J. Med.*, 56, 1945, June 15, 1956.
6. Olwin, J.: Principles of anticoagulant therapy and their application, *M. Clin. North America* 39:1, 1955.

## OCCULT URETERAL INJURY IN PELVIC SURGERY

### A CASE OF URETERO-RETROPERITONEAL FISTULA

HUGO J. RIS, M. D. AND EDWIN BRADLEY, M. D.\*  
Greenville, S. C.

**I**njury to the ureters still is of concern to all doing pelvic surgery.

The general impression today is that of increased incidence of ureteral injury in the past two decades, partly because total abdominal hysterectomy is done rather than a subtotal procedure,<sup>1</sup> though even during a subtotal hysterectomy a ureter may easily be traumatized.<sup>3</sup>

The value of ureteral catheterization before entering a pelvis with severe chronic pelvic inflammatory disease or endometriosis is re-emphasized.

The frequent use of pre-operative intravenous urograms in the presence of pelvic pathology is justified since a surprisingly high percentage of candidates for gynecological surgery show either distortion or dilatation of the ureters, or both: e. g. in from 50-80% of marked uterine prolapse.<sup>13, 16</sup>

The exact overall incidence of ureteral injuries occurring during pelvic surgery is not

known. Operators are not enthusiastic to report such cases.

Cramer and Dodson described 24 ureteral injuries in 3414 major gynecologic surgical procedures, giving an incidence of 0.7%.<sup>6</sup>

In the series of Everett and Mattingly 33 ureteral injuries and ligations occurred in 12,500 abdominal operations for *benign* pelvic conditions (i.e. incidence of 0.264%) and one in 500 vaginal hysterectomies (i.e. incidence of 0.2%).<sup>8</sup>

Newell reported 15 known ureteral injuries in 3144 hysterectomies (944 total abdominal, 128 vaginal, 2072 supravaginal in the period from January 1, 1915 to November 1, 1938). This is an incidence of 0.47%. Six of Newell's cases of injured ureters were found post-operatively at autopsy because the pathologist paid special attention to the ureters of gynecologic patients.<sup>14</sup>

This leads to the question of mortality of surgical unilateral ureteral injuries. Bland in 1925 reported a mortality of 18.8%.<sup>2</sup> Recent

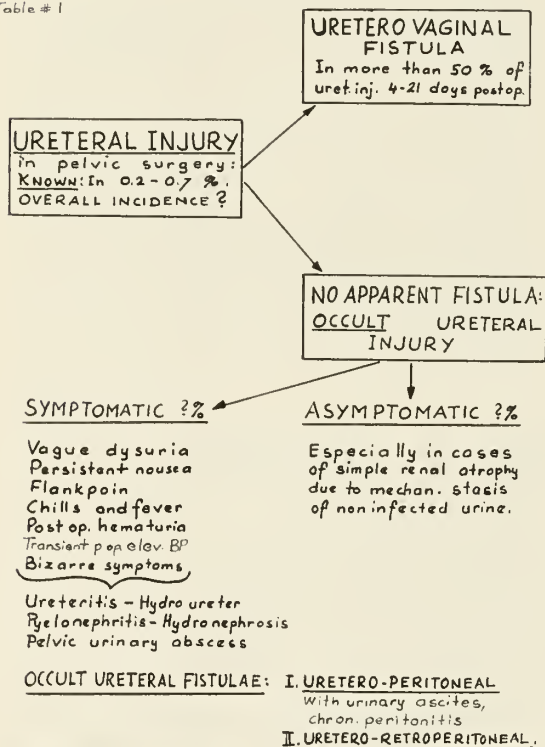
\*From the Ob-Gyn. Dept., Greenville General Hospital, Greenville, S. C.

reports give the impression of improvement of these figures due to modern urological management and antibiotics.

### Clinical Course of Unilateral Ureteral Injury.

(Table 1)

Table # 1



In the majority of the cases a uretero-vaginal fistula will develop within 4-21 post-operative days.<sup>13</sup> Probably a smaller number of the patients who do not get a fistula are relatively asymptomatic especially when simple renal atrophy occurs due to presence of mechanical stasis of non-infected urine. More often signs and symptoms which point to occult trauma of the ureter occur. These are: vague dysuria, persistent nausea, flank pain, chills and fever, post-operative hematuria or newly acquired transient hypertension.

In cases of unilateral ureteral damage the nonprotein nitrogen may not be elevated at all and the urinary output may be satisfactory.

In our experience patients with bizarre symptoms had been treated for such entities as diverticulitis of the bowels, pathology of the spine and hips and other simulated conditions before the diagnosis of occult trauma to a ureter was made.

We had the occasion to observe post-operative hematuria due to hemorrhagic ulcer of the bladderneck, apparently caused by the bag of the Foley catheter. Removal of this catheter resulted in cessation of the hematuria.

Martius recommended the use of the self-retaining indwelling Milkulicz catheter: a straight catheter is pulled through a small perforated oval rubber disc. This disc is glued to the catheter approximately 1 inch below the tip. After the catheter is inserted it is brought behind the labia minora and it makes suturing or taping of the catheter in most cases superfluous, and also eliminates the need for an intravesical balloon.<sup>12</sup>

The underlying pathological changes which give rise to the signs and symptoms of a damaged ureter are: ureteritis, hydroureter, pyelonephritis, hydronephrosis and pelvic urinary abscess.

Besides these more common findings, there seems to be a rare group of occult ureteral fistulae which do not manifest themselves to the patient by urinary incontinence.

Hunner and Everett of Johns Hopkins Hospital in 1930 and 1932 reported two cases of ureteroperitoneal fistulae with urinary ascites and chronic peritonitis.<sup>11</sup> A third case was recently reported by Dr. Everett.<sup>9</sup>

In contrast to this type of occult ureteral fistula with leakage of urine into the peritoneal cavity, the following case presents a ureteral fistula draining into the retroperitoneal space.  
*Case Report*

A 42 year old, obese, white woman, gravida 15, para 7, abortions 8, underwent vaginal hysterectomy, repair of enterocele, rectocele and cystocele on February 11, 1957 for correction of uterine prolapse and urinary stress incontinence. Following surgery clear bloodless urine was obtained from the indwelling catheter.

The post-operative course was complicated by an almost daily elevation of the afternoon temperature to 100° and 101° F., beginning on the third post-operative day.

The Foley catheter was removed on the 6th post-operative day following which the patient voided satisfactory amounts of bloodless urine. On the 10th post-operative day a urinary tract infection was noted. Urine cultures yielded rich growth of *E. Coli*, sensitive to and treated with Furadantin (100 mg. t.i.d. p.o.) and Chloramphenicol (Chloromycetin) 250 mg. q.6 h. p. o. for five days.

The patient occasionally complained of pain in the



left hip. After becoming afebrile and asymptomatic, she was discharged on the 15th post-operative day.

At home the patient had no complaints referable to the urinary system. However, the pain in her left hip recurred, became more marked and radiated to the left thigh. She returned with this complaint approximately five weeks post operatively. At that time roentgenograms of the left hip were not remarkable. An orthopedic consultant considered pubic periostitis a possible cause of the patient's complaints. Two days later the patient experienced tingling of the left foot.

Roentgenograms of the lumbo-sacral spine and pelvis showed a large mass in the left side of the abdomen with a smooth lateral border, displacing stomach and intestines to the right. It was difficult to outline the psoas margin.

Pelvic examination confirmed these findings. An intravenous urogram showed negative findings on the right but no function of the left kidney.

Urinalysis, non-protein nitrogen, blood urea nitrogen, blood count and barium enema were not remarkable. Urea clearance yielded 39.7 ml. of plasma cleared per minute. Phenolphthalein test revealed 50% 2 hr. excretion of the dye. There was no hypertension present. During cystoscopy the left ureter was found to be obstructed 2 cm. above the ostium.

The clinical impression was that of a large hydronephrosis, secondary to ligation of the left ureter. However, exploration through a left kidney incision showed quite a different picture. (See sketch.)

A huge left retroperitoneal cystic space was filled with approximately 5000 ml. of blood tinged fluid. This was found to be due to an injury to the left ureter 2 cm. above the bladder junction with subsequent urinary dissection retroperitoneally along the left psoas muscle.

The left kidney appeared to be pale and of normal size. The parietal peritoneum was densely adherent to the perihilar region of the capsule of the left kidney and some bleeding was encountered in this area.

The left kidney was decapsulated, removed and drains placed in the left retroperitoneal space. The pathology report revealed mild hydronephrosis.

The post-operative course was essentially uneventful with discharge on the 14th post-operative day. The patient was asymptomatic on follow-up visits at one and four months. Pelvic examinations were not remarkable. The nonprotein nitrogen was within normal limits.

### Summary

The known incidence of injury to a ureter during pelvic surgery is 0.2 to 0.7%. A rare result of unrecognized trauma to a ureter is the development of occult fistulae of the ureter:

1. Three reported cases of uretero-peritoneal fistulae (Everett) are mentioned.
2. A case of uretero-retroperitoneal fistula

### URETERO-RETROPERITONEAL FISTULA.



is noted developing after vaginal hysterectomy and repair. This condition was not recognized until five weeks post-operatively and presented bizarre symptoms.

### REFERENCES

1. Ball, T. L.: Gynecologic Surgery and Urology. St. Louis, C. V. Mosby Co., 1957.
2. Bland, P. B.: Surgical injuries of the ureter. *M. J. & Rec.* 121:389, 1925.
3. Holland, E. and Bourne, A., editors: British Obstetric and Gynaecological Practice. Philadelphia, F. A. Davis Co., 1955. Gynecology Volume, pp. 409, 413.
4. Browne, F. J., editor: Postgraduate Obstetrics and Gynaecology. St. Louis, C. V. Mosby Co., 1950.
5. Coplan, M. M., Woods, F. M., Melvin, P. D.: Surgical injuries to the lower segment of the ureters and bladder. Use of "Diverticulite" in ureteral repair. *Tr. Southeast. Sect. Am. Urol. A.*, p. 134, 1952.
6. Reed, D. C. and Dodson, A. L.: Ureteral injury. *J. Kansas M. S.* 58:505, 1957.
7. Everett, H. S.: Gynecological and Obstetrical Urology, 2nd. ed. Baltimore, Williams and Wilkins Co., 1947.
8. Everett, H. S. and Mattingly, R. F.: Urinary tract injuries resulting from pelvic surgery. *Am. J. Obst. & Gynec.* 71:502, 1956.
9. Everett, H. S.: Uretero-peritoneal fistula with urinary ascites. *J. Urol.* 78:585, 1957.
10. Falk, H. C.: Urological Injuries in Gynecology. Philadelphia, F. A. Davis Co., 1957.
11. Hinner, G. L. and Everett, H. S.: Uretero-peritoneal fistula, with urinary ascites and chronic peritonitis. *J.A.M.A.* 95:327, 1930; *J. Urol.* 28:333, 1932.
12. Martins, H.: Gynecological Operations. Trans-

- lated and edited by M. L. McCall and K. A. Bolten. Boston, Little, Brown and Co., 1956.
13. Millin, T.: The ureter, the gynaecologist and the urologist. *Proc. Roy. Soc. Med.* 42:37, 1948.
  14. Newell, Q. U.: Injury to ureters during pelvic operations. *Ann. Surg.* 109:981, 1939.
  15. Patton, J. F.: Ureterovaginal fistula: a new method of reimplantation of the ureter into the

- bladder. *J. Urol.* 42:1021, 1939.
16. St. Martin, E. C., Trichel, B. E., Campbell, J. H. and Locke, C. M.: Ureteral injuries in gynecologic surgery. *Tr. Southeast. Sect. Ann. Urol. A.*, p. 134, 1952.
  17. TeLinde, R. W.: *Operative Gynecology*, 2nd ed. Philadelphia, J. B. Lippincott Co., 1953.

## MEDICAL COLLEGE CLINICS

### THE MEDICAL COLLEGE OF SOUTH CAROLINA

#### ELECTROCARDIOGRAM OF THE MONTH

##### Sinus Arrest

DALE GROOM, M. D.  
Department of Medicine

*Case Record*—A complication during surgery for mitral stenosis on a 42 year old housewife was cardiac arrest. Resuscitative measures including injection of ephedrine into the myocardium and direct cardiac massage resulted in an atrial flutter and, ultimately, restoration of a regular sinus rhythm. A satisfactory valvulotomy was then accomplished without further incident.

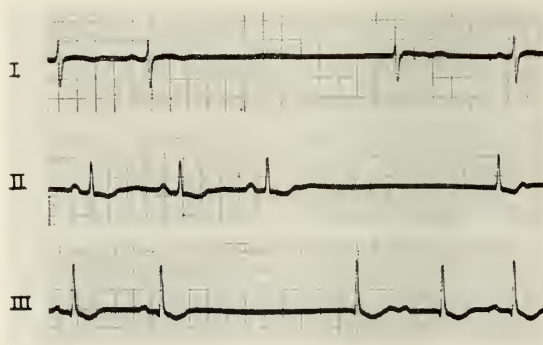
Of particular interest in this patient's past history was the appearance of "blackout spells" with the onset of congestive failure about two years previously. These had not been relieved by digitalization.

Postoperatively she continued to complain of spontaneous attacks of fainting and dizziness. During one of these, shortly before this electrocardiogram was recorded, she was observed to lose consciousness and have a generalized convulsion. The attacks were not controlled by Isuprel or atropine, but gradually abated three weeks later, concurrent with return of her P-R interval to normal.

*Electrocardiogram*—There is a basic sinus rhythm at a rate of 62 per minute. This is interrupted frequently by pauses of from 1 to more than 2½ seconds during which there is complete cessation of electrical activity. The pauses are terminated by a normal QRS complex (or, frequently, P waves in subsequent tracings), followed by resumption of regular sino-atrial activity. Length of the pauses is not a consistent multiple of the basic cycle length.

Atrioventricular conduction is variable, most P-R intervals being slightly prolonged (0.22 sec.). The initial atrial impulse after each pause is blocked completely or greatly delayed at the A-V node.

QRS complexes in the standard leads show a right axis deviation. In the precordial leads right ventricular hypertrophy was evident and the T wave inversions were consistent with hypertrophy and digitalis effect.



*Discussion*—Sinus arrest is a temporary cessation of atrial activity due to failure of the normal cardiac pacemaker to initiate impulses. It is usually distinguished from sino-atrial block in which transmission of the regular impulses from the S-A node is momentarily blocked, partially or completely. For example, in the latter case every second, third or fourth sinus impulse may be blocked producing recurrent dropped beats in an otherwise regular rhythm. Sinus arrest, on the other hand, is characterized by pauses of varying length which are not multiples of the basic cycle length. In either case atrial standstill results, no P wave is inscribed, and cardiac action is suspended until the normal rhythm is resumed or an "escape" rhythm emerges from some part of the heart below the pacemaking node.

Commonly the ectopic mechanism arises at the atrioventricular level—the so-called "nodal escape" beats seen in this patient's tracing. Occasionally the pauses are terminated by ventricular escape which, like other ectopic beats from the ventricles, show QRS complexes which are widened and deformed according to their site of origin. Rarely atrial escape will restore cardiac function after such a pause. In any of these mechanisms there may be retrograde conduction through the atria, with P waves of reversed polarity falling before, within, or after their QRS complexes. Usually regular atrial activity will be resumed after a single escape beat from whatever origin. If not, persistence of the nodal or idioventricular rhythm is necessary to sustain life.

The clinical symptoms depend of course upon the duration of the periods of cardiac standstill. Brief pauses may go undetected by the patient while ones of sufficient length to impair cerebral circulation cause transient dizziness, fainting, or "Stokes-Adams" attacks. Doubtless many more sudden deaths are due to sinus arrest or S-A block than are documented by electrocardiograms.

It should be noted that a block of every second impulse from the sino-atrial node produces a record which is indistinguishable from that of sinus bradycardia—until release of the block abruptly doubles the rate. Also some degree of sinus arrhythmia is said to be a frequent accompaniment of both types of atrial standstill, and the pauses themselves have been noted to be initiated during the inspiratory phase of respiration. Sinus arrest can be induced in many normal subjects by manual stimulation of the carotid sinus.

The differentiation between sinus arrest and S-A block may be of some practical importance. Probably sinus arrest is more frequently due to functional disturbances whereas the blockage of impulse transmission may more often be caused by pathology in or around the sino-atrial node. But there is electrocardio-

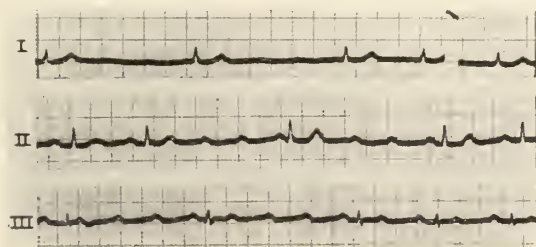
graphic evidence that either can be produced by vagal stimulation incident to anesthesia, surgical procedures or to digitalis toxicity. Sinus arrest is the probable mechanism of symptoms in most cases of the carotid sinus syndrome. Acute infections, and especially rheumatic fever which appears to have a predilection for the conduction system, have been held accountable. Less common causes given for sino-atrial block are quinidine intoxication, hyperkalemia, hypersensitivity reactions, and trauma to the heart.

The treatment of atrial standstill follows from recognition of its cause, if this is possible. Isuprel has been advocated as a means of increasing the excitability of the pacemaker in sinus arrest. Whether its action is effective in preventing the pauses or not, the drug might be expected to shorten their duration by facilitating the earlier emergence of an escape rhythm from below. The rationale of atropine is that of controlling excessive vagal depression of the upper centers. The fact that neither of these measures (plus reduction of the dosage of digitalis) proved effective in this case lends weight to the clinical impression that the sinus arrest was a manifestation of rheumatic activity.

## ERRATUM

This cut of the electrocardiogram showing Paroxysmal Atrial Tachycardia with Block was omitted inadvertently in the March 1959 issue (Vol. 55 p. 100)

Please refer to the article by Dr. Groom.







## PRESIDENT'S PAGE

I would like to take this opportunity, in my last article for the President's Page, to express my sincere appreciation to the members of the various committees, the council and officers of the association for the excellent work they have done this year. This has been of inestimable value in administering the duties of the office of president. I have thoroughly enjoyed the year and hope that in the future I can, in some way, repay the officers and members of the Association for their cooperation.

During the next few months American Medicine will face its most crucial test in trying to maintain the private enterprise system of practice. The vast majority of our efforts will have to stem from the grass-roots level. At the present time our main problem is to devise a comparable or better method than government control can offer to care for the members of our aging population in the over sixty-five years group. Within the next few months a satisfactory plan must be developed and operating successfully within the next year to finance the cost of their medical care.

A plan of this magnitude will require one hundred percent cooperation between the doctors, from the grass-roots level up, and their own medical care plans to insure the successful operation of such a crash program. Time is not on our side, but I hope that our State will be among the first to develop this insurance coverage so desperately needed right now. If this is not done we will certainly be the loser and federal control of medicine will be upon us.

R. L. CRAWFORD, M. D.  
President

# Editorials

---

## THE ANNUAL MEETING IN MAY

The 111th Annual session of the Association will transpire in Columbia this year, after some several times of visitation at Myrtle Beach. We are all glad to be aiming at Columbia again, except possibly a few die hards who miss the dubious and uncertain pleasures of the beach. Columbia is familiar to most of us and according to its Chamber of Commerce "is a beautiful, substantial, well-rounded city, whose alert people, although rightfully proud of their heritage, live in the present and plan for the future." With this statement we have no quarrel, and we expect fully to see the salubrious surroundings and progressive people do their best to make the visit of the Association an agreeable one.

Greater Columbia counts an estimated population of 142 thousand plus, and seems to be growing at a right smart rate. Recreation and entertainment are to be had, and the city offers the productions of The Town Theatre, and the usual moving picture fare. There are sights to be seen such as the Art Museum, the Woodrow Wilson Home, the Hampton-Preston Mansion, the State House, and numerous other attractions according to taste. Columbians are notoriously good hosts, and there is every reason to suspect that their reputation will be maintained on this coming occasion.

---

## THE PROGRAM COMMITTEE

Every year an important committee of the Association performs a tremendous amount of work in building a suitable program for the annual meeting. Usually their efforts are not realized or recognized or even heard of unless the local participants in the program see fit to make their presence known. Anyone who has served on a program committee of major importance is well aware of the great amount of correspondence, arranging and rearranging, and general correction of detail which is almost unavoidable in any proper effort. No program committee can foresee how well their



DR. O. B. MAYER

---

speakers will be accepted by the medical audience. They seek to secure the best possible talent, and to balance the program so that most of the membership can be satisfied by finding something of interest. Not every famous man makes a good presentation, but the committee must gamble on his ability and desirability as an expounder of his doctrine.

The committee this year has consisted of Dr. O. B. Mayer, Dr. William Weston, Jr., Dr. George Bunch, Dr. Edmond R. Taylor, Dr. E. R. Barber, and Dr. R. W. Hanckel. These able members have composed a program which has all the appearance of being a most attractive one, and which can offer something to all of our members. It is unlikely that many of us will go out of our way to make any personal indication of appreciation of the work of the committee, but certainly the members of the Association can best show that they realize the efforts required by attending the scientific sessions to the best of their ability.

---

## SCHOOL BOARDS RECOGNIZE SERVICES OF DOCTORS

The following letter received by Dr. Crawford indicates that the voluntary services of doctors on School Boards throughout the state are not unappreciated. Kind words such as these should certainly stimulate us to continued effort in community service of this kind and in other fields.

SOUTH CAROLINA ASSOCIATION OF  
SCHOOL BOARDS, INC.  
1510 Gervais Street, Columbia

February 17, 1959

Dr. R. L. Crawford  
229 S. Main Street  
Lancaster, S. C.

Dear Dr. Crawford:

The officers and directors of the South Carolina Association of School Boards are proud of the service doctors are rendering as members of the 107 local school boards of education throughout South Carolina. These M. D.'s are going "the extra mile" in citizenship to give volunteer leadership in education. THIS IS ONE OF THE HIGHEST TYPES OF COMMUNITY SERVICE—receiving no salary and thus having "no ax to grind".

As President of the South Carolina Medical Association would it be appropriate to ask the M. D.'s attending your Annual Convention who serve on local school boards to stand and be recognized by the Association? Please express to them at this time our sincere appreciation for the many things that they are doing as trustees to build a stronger and more secure educational program for the boys and girls of our great state.

On the Board of Directors of the State Association of School Boards Dr. George D. Johnson of Spartanburg is chairman, with Dr. Henry Brooks, Conway of our Liaison Committee to work with the South Carolina Medical Association. These two outstanding doctors are rendering our State Office a great service. Call on them at any time.

It would be appreciated if space could be found in your professional Journal to recognize these doctors.

Sincerely yours,

O. S. Aiken, President

Jack Lowe

T. Jackson Lowe, Executive Director

P.S. The late Dr. O. T. Finklea of Florence served as the first president of the South Carolina Association of School Boards. He certainly gave us fine leadership. We were very proud of his service.

### THE OPEN HOUSE ABUSE

Somehow the editorial voice crying in some sort of wilderness seems to have failed to impress on all of our members the undesirability of holding "Open House" when new offices are opened or new practices inaugurated. At least we have culled two recent reports from the newspapers on the kind of activity which seems to us far below the dignity of a practicing physician.

Commercial houses frequently hold grand openings with prizes, prayers, and patronage. Recent accounts of "Open Houses" in the state

seem to indicate that very much the same technique is being used, whereby the new office receives an ecclesiastical blessing and various exalted sentiments are expressed for the success of the physician and his practice in the community. How much further the welcome is extended the accounts do not say, nor do they indicate what variety of refreshments or inducement may be offered to bring the prospective patients into the walls of the office.

It is doubtful that our code of ethics makes any very firm definition of the character of such procedures, but it would seem obvious that they are not in keeping with the best standards of the profession and that they might well be considered as subjects of considerable concern by the more critical members of the community as well as those of the profession. The Association might well make some statement of opinion as to the feeling of the profession generally. If it is a favorable statement, the *Journal* will have to admit chastisement, if not error, and, unconvinced, will be obliged to cease its animadversions.




provides therapeutic levels . . . for 24 hours . . .  
with low incidence of sensitivity reactions . . .

WHENEVER SULFAS ARE INDICATED<sup>®</sup>

# KYNEX

Sulfamethoxypyridazine Lederle

0.5 Gm. TABLETS/NEW ACETYL PEDIATRIC SUSPENSION

LEDERLE LABORATORIES, a Division of  
AMERICAN CYANAMID COMPANY, Pearl River, New York 



---

## NEWS

---

### DR. JERVEY IS PRESIDENT-ELECT OF MEDICAL BOARD FEDERATION

Dr. Harold E. Jervy, Jr., of Columbia, was named president-elect of the Federation of State Medical Boards of the United States at the annual meeting of the state boards last Tuesday in Chicago.

Doctor Jervy who has served for the past two years as secretary of the South Carolina Board of Medical Examiners, will assume duties as president of the Federation of State Medical Boards of the United States next February. He will succeed Dr. E. H. Lawson of New Orleans, La., who recently assumed the presidency.

Doctor Jervy will become the first president from South Carolina to serve as president of the State Boards. It was organized in 1913. Now 38 years old, he also will be one of the youngest doctors to serve as president. Some years ago Doctor Rypin of New York was named president-elect at the age of 38.

A native of Charleston, Dr. Jervy was graduated from the University of South Carolina, and entered the U. S. Navy in 1941.

During the war he served as a line officer on destroyers in both the Atlantic and Pacific areas. He was discharged in 1945 as lieutenant commander.

He entered The Medical College of South Carolina after being released from active duty, and was graduated in 1949. He interned at Greenville General Hospital.

After completing his internship he returned to Columbia to practice, and now has his office at 1515 Bull Street.

Doctor Jervy was appointed to the State Board of Medical Examiners in 1953. This board is responsible for approving licenses for doctors to practice, and for enforcing the Medical Practice Act.

The board is composed of eight members who are appointed for four-year terms by the Governor following recommendations by the State Medical Association.

The Federation of State Boards is composed of state board members, deans of all medical colleges, and others interested in medical education and licensure.

Doctor Jervy is a member of the Columbia, State, and Southern Medical Associations, and the American Medical Association. He is a delegate from the South Carolina Chapter of the American Academy of General Practice to the House of delegates of the American Academy.

---

Dr. Berryman E. Coggeshall, Jr., a native of Darlington, has announced plans to begin the practice of general surgery in Florence in July, where he plans to be affiliated with McLeod Infirmary and Saunders Memorial Hospital.

Dr. Coggeshall will complete a four year general surgery residency on the Tulane Surgical Service at Charity Hospital in New Orleans in July. For the last six months he has been Medical director and chief surgeon of the Huey P. Long Charity Hospital in Alexandria, La.

He received his M.D. Degree from Duke Medical School in 1952. During his senior year, he received four months training at Guy's Hospital in London, England. His internship was spent at Philadelphia General Hospital, following which he served two years as an Army Surgeon in Europe as commanding officer of the Army Hospital in Bordeaux, France.

---

Dr. Robert A. Martin has become associated with Dr. Max A. Culp in the general practice of medicine in Fort Mill.

Dr. Martin, his wife and daughter recently returned from Germany where he served in the Medical Corps of the U. S. Army, receiving his discharge from the service upon arriving back in this country. He has a degree in pharmacy from the University of South Carolina and took his medical training at the Medical College of South Carolina, following which he interned for a year in Philadelphia at University Hospital. He entered the Army immediately upon completion of his internship.

---

H. R. Gudmundson, M. D., 16-B Windermere Boulevard, Charleston, wishes to announce the association of T. F. Hassell, M. D. in the General Practice of Medicine.

---

The American College of Physicians has joined Cutter Laboratories in appealing the decision of January 17, 1958 of the Superior Court in Alameda County awarding two children, Anne Elizabeth Gottsdanker and James Randall Phipps, damages for polio infections allegedly resulting from the use of Cutter vaccine despite the jury's finding that Cutter Laboratories was not negligent.

In its *amicus curiae* brief (friend of the Court) it points out that "the creation of an absolute liability concept would greatly impair future progress. The introduction of new products and procedures would be stifled and mankind would be denied the continual advancement of medical science. . . . We believe that when, as in the cases before the court at this time, a biological is made according to strict government specifications and complies with the best scientific and productive knowledge available and when the manufacturer is absolved of all possible negligence by the jury, as this defendant was, no liability should be incurred when an injury occurs because of the user's own peculiar susceptibility or because of insufficient scientific knowledge at that time. To create such an absolute liability would be to saddle the world of medical science with an unfair burden. . . . We in no way feel that we are overdramatizing these results for it is clear that researchers

would be unwilling to try new drugs on patients, practicing physicians would be afraid to avail themselves and their patients of the new wonder drugs and pharmaceutical houses would not be willing to manufacture new products should this concept be applied, for it holds the defendant liable without fault and liable for the unknown."

"Since the fact is self-evident that certain treatments will save lives or alleviate suffering, it is unrealistic and unreasonable to say that there must be no unknown untoward effects. If we take this position, then the conquering of disease in the future will be far slower, as neither manufacturers nor insurance companies can afford to insure against the unknown and the unpreventable. Thus, the lifesaving drug or biological that may save thousands of lives every year from cancer which might be available tomorrow would probably, under the absolute liability situation, be withheld for another ten years of testing and "wait and see" and "make sure" periods. To be sure, a statistically small number hypersensitive or hypersusceptible individuals will thus be saved from harm, but in the meantime thousands who might otherwise live, or live without suffering, will necessarily be denied medical care.

"How can any scientist, physician, hospital or pharmaceutical producer become involved in any forward steps in medicine, no matter how surrounded by standards, if he is to be held responsible for knowledge that does not, and cannot, exist until the future unfolds."

(March 30, 1957 issue of the Journal of The American Medical Association)

#### MEDICINE AND THE LAW

Excerpt from: OFFICIAL OPINIONS OF THE JUDICIAL COUNCIL

Question: Is it ethical for a physician to hold stock in a pharmaceutical concern?

Answer: The physician as a citizen has the right to make investments according to his own best judgment. The fact that he is a physician should not preclude him from investing in the stock of a pharmaceutical company. Returns from his investment could not, in any practical sense, be considered a rebate or an indirect income gained secretly from patients for whom he may have prescribed products of the firm whose stock he holds, provided, of course, no subterfuge is employed and no unusual control of the company is exercised by the doctor.

#### AMEF

The American Medical Education Foundation reports that state totals show a dramatic increase for the past year. South Carolina led her southern

neighbors with a 281% increase. Some regional comparisons are interesting.

	1957 Total	1958 Total
Alabama	\$ 6,599.00	\$ 8,387.16
Florida	6,460.00	6,978.15
Georgia	3,586.00	4,494.60
Kentucky	1,540.00	2,425.68
Louisiana	2,316.00	3,725.87
Massachusetts	5,419.00	7,767.91
North Carolina	5,690.00	5,338.89
South Carolina	14,267.00	40,149.36
Tennessee	7,719.00	6,916.19
Texas	29,717.00	44,013.90

#### ARIZONA AND SOUTH CAROLINA OFFER AMEF PLANS

Representatives from two states presented programs new in their respective states which offer promise for all AMEF committees as well as increased revenue to the Foundation. Speaking were Dr. H. W. Kohl of Arizona and Drs. John Arthur Siegling and Keitt M. Smith of South Carolina. Dr. Kohl outlined the program in Arizona through which retail druggists have been urged by their state association to send contributions to AMEF rather than present Christmas gifts to those doctors they wish to remember at Christmastime. Dr. Kohl read from editorials in the publication of the Arizona Druggist's Association which stated that "... gifts (from druggists) are many times unwanted, unneeded or duplicated several times over in the doctor's office. A contribution to AMEF will be appreciated, serve a most useful purpose and do much to establish better professional relationships." The plan is jointly endorsed by the Arizona Medical Society and the Druggists' Association.

Dr. Siegling explained a recently-instituted program at the Medical College of South Carolina which had much to do with that state's 300% increase over the 1957 AMEF totals. The university medical school faculty voluntarily adopted the plan through which proportional amounts of income earned from outside practice are routed to AMEF. All outside income above a ceiling adopted by the group goes to the Foundation. These funds are earmarked for the school. Dr. Keitt M. Smith followed with a discussion of other AMEF efforts in South Carolina. —Taken (with corrections) *From The AMEF "Foundation"*

The Governor's Conference on Nutrition sponsored by The South Carolina State Nutrition Committee was held at the Wade Hampton Hotel, March 17, 1959.

The following persons from South Carolina attended the Blue Shield Professional Relations Conference in Chicago, February 9-11.

William Sandow, Jr., Executive Director, South Carolina Medical Care Plan; M. L. Meadors, Executive Secretary, South Carolina Medical Association;

David C. Dick, Director of External Affairs, South Carolina Medical Care Plan; Dr. R. L. Crawford, President, South Carolina Medical Association; Robert Tomlin, Physician Relations Manager, South Carolina Medical Care Plans.

---

## ANNOUNCEMENTS

---

MEDICAL COLLEGE OF GEORGIA  
and  
MEDICAL COLLEGE OF GEORGIA  
FOUNDATION, INC.

Announce A  
Clinical Workshop On  
THE ILL NEWBORN INFANT  
May 26, 27, 28, 1959  
Augusta

This course will focus attention on the ill newborn infant. The more common diagnostic problems will be discussed after an introductory session stressing the applicable physiologic deviations of these infants. Resuscitation, urgent surgery in the newborn, blood problems, post-maturity and the offspring of diabetic mothers will be presented by panels from the faculty. An open panel discussion is to be devoted to pertinent questions submitted by participants. Dr. Batson of the Visiting Faculty will discuss "The Staphylococcal Problem."

### Faculty:

Dr. Blair E. Batson, Professor and Chairman of the Department of Pediatrics, University of Mississippi.

Dr. Victor C. Vaughan, III, Professor and Chairman of the Department of Pediatrics, Medical College of Georgia.

Dr. William E. Laupns, Assistant Professor of Pediatrics, Medical College of Georgia, and other members of the faculty of the Medical College of Georgia.

For Further Information Write:

Dr. Claude-Starr Wright  
Department of Continuing Education  
Medical College of Georgia  
Augusta, Georgia

The Fee is \$25.00.

COURSE WILL BE LIMITED TO TWENTY PHYSICIANS.

Application has been made to the American Academy of General Practice for Credit I, 16 hrs.

---

### ATLANTIC CITY TO HOST A.M.A. ANNUAL MEETING

Some 15,000 physicians will gather in Atlantic City, N. J., next June 8-12 for the 108th annual meeting of the American Medical Association.

Besides physicians, the meeting will be attended by residents, interns, nurses, technicians, students,

and physician's wives and members of their families.

The five-day convention—the largest medical meeting in the world—is being held in Atlantic City for the 16th time. The first meeting was held there in 1900.

Doctors will have the opportunity to catch up on hundreds of aspects of a rapidly-changing medical world. This information will be presented in the form of scientific exhibits, lectures, motion pictures, panel discussions, televised surgical procedures, and industrial exhibits.

New medical research findings and methods of handling daily medical problems will be reported by 500 physicians in scientific papers or participation in symposium and discussion groups.

There will be over 300 scientific exhibits and a similar number of industrial exhibits on display at the famed Convention Hall. The latter group will be exhibited by pharmaceutical houses, medical equipment firms, and other manufacturers.

The House of Delegates will meet throughout the week in the Traymore Hotel, headquarters for the meeting. The 20 scientific sections of the A.M.A. and five government medical services will also be represented in the House.

First order of business for the House will be the selection of a physician to receive one of medicine's highest honors—the Distinguished Service Award. He will be elected from three persons, whose names are submitted by the Board of Trustees. Nominees are screened by the Board from names submitted by the general membership.

The opening session will be addressed by Dr. Gunnar Gundersen, La Crosse, Wis., outgoing president, and his successor, Dr. Louis M. Orr, Orlando, Fla.

A president-elect to serve one year and be inaugurated as president in 1960 will be elected during the meeting.

For the fourth year, high school students who have won special A.M.A. awards in the National Science Fair will show their prize-winning work at the scientific exhibit.

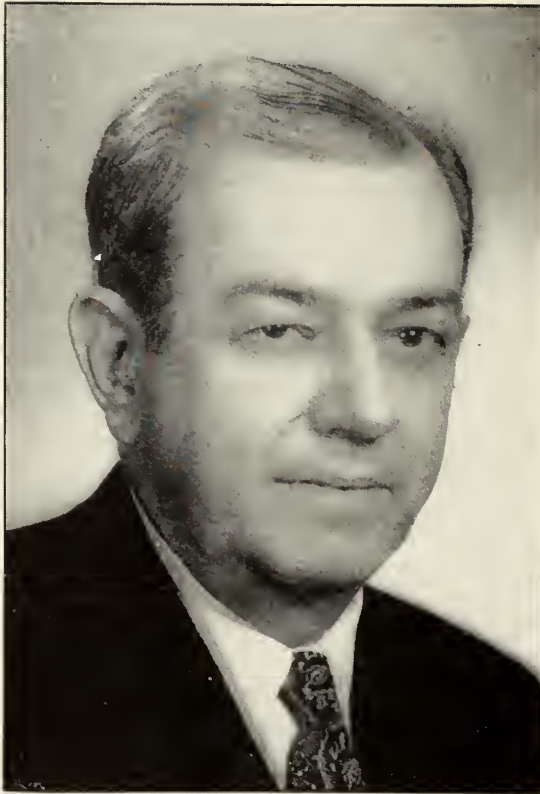
The annual film program will be highlighted by the presentation of 60 medical motion pictures.

The Woman's Auxiliary to the A.M.A. will hold its meeting Tuesday through Thursday. Representatives of the 75,000 members—all doctor's wives—will discuss their program in sessions at the Chalfonte-Haddon Hall.

Other sidelights of the meeting will be the special art exhibits including that of the American Physician's Art Association and the 43rd annual American Medical Golfing Association tournament.

For advance hotel and meeting registration information, contact the Convention Services Department, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.





DR. R. L. CRAWFORD  
PRESIDENT



DR. WM. WESTON, JR.  
PRESIDENT-ELECT  
AND DELEGATE TO A. M. A.



# One Hundred and Eleventh Annual Session

## SOUTH CAROLINA MEDICAL ASSOCIATION

May 12, 13, 14, 1959

### COLUMBIA HOTEL

Columbia, S. C.

#### GENERAL PROGRAM

##### TUESDAY, MAY 12

- 9:00 A. M. Meeting of Council
- 2:30 P. M. House of Delegates (Ball Room)
- 8:00 P. M. Meetings of Reference Committees

##### WEDNESDAY, MAY 13

- 9:15 A. M. Scientific Films
- 9:30 A. M. House of Delegates Resumes (Ball Room)
- 12:30 P. M. Adjournment—House of Delegates Sine Die
- 1:00 P. M. Alumni Luncheon (Main Dining Room)
- 2:55 P. M. Scientific Session (Ball Room)
- 9:00 P. M. Alumni Association Entertainment (Ball Room)

##### THURSDAY, MAY 14

- 9:00 A. M. Memorial Service
- 9:15 A. M. President's Address
- 9:45 A. M. Scientific Session Resumes
- 12:45 P. M. Luncheon Recess
- 2:15 P. M. Scientific Session Resumes
- 4:30 P. M. Adjournment
- 7:00 P. M. Refreshments—Courtesy Educators Mutual Insurance Company
- 8:00 P. M. Annual Banquet and Ball (Alumni Association and Guests)

#### HOUSE OF DELEGATES

Dr. R. L. Crawford, Presiding  
Order of Business  
Tuesday, May 12

- 2:30 P. M. Call to Order
  - Invocation
  - Report of Credentials Committee
  - Opening Remarks by the President
  - Introduction of President-Elect
  - Announcement of Reference Committees
  - Presentation of Resolutions and Recommendations
- 3:15 P. M. Introduction of Officers and Guests of Woman's Auxiliary
  - Reports of Officers

The President  
The Executive Secretary  
The Secretary  
The Treasurer  
The Editor of the Journal  
The Chairman of Council  
The Delegates to the A. M. A.

Reports of Standing Committees

(The reports of the Committees will have been published in the Journal and will not be read before the House. Any supplementary remarks by the Chairman will be heard at this time.)

Report of State Board of Medical Examiners

Report of Executive Committee of State Board of Health

Unfinished Business

New Business

4:30 P. M. (Special Order) The Annual Meeting of the Corporation, The South Carolina Medical Care Plan

5:30 P. M. Adjournment until 9:30 A. M. Wednesday

8:00 P. M. Meetings of Reference Committees (All Members of the Association are invited to appear before the Committees considering matters in which they are interested. Meeting places will be announced.)

Wednesday, May 13

9:30 A. M. Call to Order

Report of Reference Committees

11:30 A. M. Annual Elections

Officers:

President-Elect

Vice-President

Secretary

Treasurer

Delegate to the A.M.A.: (2-yr. term)

(The term of Dr. William Weston, Jr. expires December 31, 1959)

Alternate Delegate to the A.M.A.: (2-yr. term)

(The term of Dr. Robert Wilson expires December 31, 1959)

Councillors: (3-yr. term)

Third District (The term of Dr. C. J. Scurry expires)

Sixth District (The term of Dr. J. P. Cain, Jr. expires)

Ninth District (The term of Dr. John M. Fleming expires)

Members of Mediation Committee: (3-yr. term)

Third District (The term of Dr. Martin M. Teague expires)

Sixth District (The term of Dr. Walter R. Mead expires)

Ninth District (The term of Dr. Harold P. Hope expires)

Members of the State Board of Medical Examiners: (4-yr. term)

Second Congressional District (The term of Dr. Kirby D. Shealy expires)

Fifth Congressional District (The term of Dr. Roderick MacDonald expires)

Selection of Place for the 1960 Annual Meeting

Sine Die Adjournment





# SOUTH CAROLINA MEDICAL ASSOCIATION

May 12-13-14, 1959

## SCIENTIFIC PROGRAM

### WEDNESDAY, May 13, 1959

- 2:30 P. M. - 3:00 P. M. Call to Order  
Paper "A Doctor Looks at the Problem of Radiation Hazards"—Dr. Eugene P. Pendergrass—Professor of Radiology, University of Pennsylvania, Philadelphia, Pennsylvania.
- 3:00 P. M. - 3:30 P. M. "The Obstetrician's Responsibility in Perinatal Survival"—Dr. J. Decherd Guess—Greenville, S. C.
- 3:30 P. M. - 3:45 P. M. Recess
- 3:45 P. M. - 4:15 P. M. "Advances in Cancer Control"—Dr. J. R. Heller—National Cancer Institute, Bethesda, Maryland. Dr. Heller's visit is sponsored by the American Cancer Society, South Carolina Division.
- 4:15 P. M. - 5:30 P. M. Panel on Cancer  
Moderator—Dr. H. Rawling Pratt-Thomas—Charleston, S. C.  
Investigation—Dr. J. R. Heller  
Radiologist—Dr. Eugene P. Pendergrass  
Surgeon—Dr. John C. Hawk, Jr.—Medical College, Charleston, S. C.

### THURSDAY, May 14, 1959

- 9:00 A. M. Memorial Service
- 9:15 A. M. The President's Address
- 9:45 A. M. - 10:15 A. M. "Fenestration Operation on Ear" and Movie—Dr. J. Brown Farrior—Farrior Clinic, Tampa, Florida
- 10:15 A. M. - 10:30 A. M. Recess
- 10:30 A. M. - 11:00 A. M. "Some Pediatric Orthopedic Problems"—Dr. William T. Green—Professor of Orthopedies, Harvard University, Boston, Massachusetts. Dr. Green's visit is sponsored by The Crippled Children Society of South Carolina.
- 11:00 A. M. - 12:15 P. M. Panel on Vascular Disease  
Moderator—Dr. Robert Wilson—Charleston, S. C.  
Investigation—Dr. Edwin Boyle, Jr.—Medical College, Charleston, S. C.  
Surgical Aspects—Dr. J. Manly Stallworth—Medical College, Charleston, S. C.  
Medical Aspects—Dr. Thomas Findley—Medical College of Georgia, Augusta, Georgia

- 2:00 P. M. - 2:30 P. M. "New Drugs"—Dr. Robert P. Walton—Medical College, Charleston, S. C.
- 2:30 P. M. - 3:00 P. M. "Vesico-ureteral Reflux in Children: Diagnosis and Management"—Dr. Victor A. Politano—Department of Urology, Duke University, Durham, North Carolina
- 3:00 P. M. - 3:15 P. M. Recess
- 3:15 P. M. - 3:45 P. M. "Problems in Staphylococcus Infection"—Dr. Walter A. Murray—Department of Medicine, University of Ohio, Columbus, Ohio
- 3:45 P. M. - 5:00 P. M. Clinico-Pathologic Conference  
 Clinician—Dr. Thomas Findley  
 Pathologist—Dr. DuBose Dent, Jr., Pathologist, Baptist Hospital, Columbia, S. C.
- 5:00 P. M. Adjournment
- 8:00 P. M. Banquet  
 Speaker—Dr. Gunnar Gundersen—President of the American Medical Association

DR. HENRY C. ROBERTSON, JR.  
 VICE PRESIDENT





DR. ROBERT WILSON  
SECRETARY



DR. HOWARD STOKES  
TREASURER



DR. GEORGE D. JOHNSON  
DELEGATE TO A. M. A.



# Program Speakers

## *EUGENE P. PENDERGRASS, M. D.*



Born October 6, 1895, Florence, South Carolina. Education: Florence Public Schools; Wofford College, 1912-1914; University of North Carolina, 1914-1916; University of Pennsylvania, 1916-1918; M. D. from University of Pennsylvania, 1918. War Services: 1918-19, Lieutenant (MC) USN; 1935-41, Lieutenant Commander MC-V (S), USNR. Academic and Hospital Career: Intern, University of Pennsylvania Hospital, 1918-19; Instructor in Roentgenology, Graduate School of Medicine, University of Pennsylvania, 1920; Associate Director, Department of Radiology, University of Pennsylvania, 1922-1939. Present Positions, University of Pennsylvania: Professor of Radiology, School of Medicine; Professor of Radiology, Graduate School of Medicine; Director, Department of Radiology, University of Pennsylvania Hospital; Director, Department of Radiology, Jeanes Hospital, Philadelphia; Director, Donner Center of University of Pennsylvania, 1958; Consulting Radiologist, Medical Staff, The Children's Hospital of Philadelphia to May 31, 1959. Dr. Pendergrass holds active or honorary membership in an impressive list of organizations. He serves on innumerable committees and boards: eg. U. S. Pharmacopeia—Chairman, Panel on Radiology, 1956; National Research Council—Member of the Committee on Radiology, 1958; University of Pennsylvania Hospital—President, Medical Board, 1949-52; American Cancer Society—President, 1958-59; American College of Radiology—President 1948-49.

## *J. DECHERD GUESS, M. D.*



Born, Freestone County, Texas, 1891. B. S., College of Charleston, 1911. M. D., Medical College of South Carolina, 1917. Medical officer, U. S. Army, 1918-1919. Located in Greenville, S. C., 1919. Graduate student in Obstetrics-Gynecology, University of Pennsylvania, 1927-1928. Limited practice to obstetrics-gynecology, 1930. Certified by American Board, Gynecology-Obstetrics, 1939. Founding fellow, South Atlantic Association of Obstetricians and Gynecologists. Founding fellow and past-president, South Carolina Obstetrical and Gynecological Society. Founding fellow, American College of Obstetrics and Gynecology. Member, Southern Obstetrical and Gynecological Society. Past-president, South Carolina Medical Association. Longtime member, Board of Trustees, Medical College of South Carolina. Past-president, Board of Directors, and Medical Director of South Carolina Medical Care Plan (Blue Shield). Member, Pi Kappa Phi Fraternity, Club of Thirty-Nine, Poinsett Club, Rotary, Presbyterian Church. Senior Partner, Guess-Dacus Clinic. Author of numerous articles on medical and medico-economic subjects.

## *JOHN RODERICK HELLER, M. D.*



Director, National Cancer Institute. Born: February 27, 1905 at Fairplay, South Carolina. Education: B. S., Clemson College, 1925. M. D., Emory University School of Medicine, 1929. Professional Training:

Internship, Southern Pacific Hospital, San Francisco, California, 1929-1930. Surgical Resident, Mills Memorial Hospital, San Mateo, California, 1930. Clinician and special duty, Johns Hopkins Hospital, Baltimore, Maryland, 1934-1935. He has had wide professional experience in Public Health, including services as Chief, Division of Venereal Diseases, U. S. Public Health Service, Washington, D. C., 1943-1948. Professional Lecturer, George Washington University School of Medicine, 1948 - present. Special Lecturer, Georgetown University Medical School, Washington, D. C., 1946 - present. Director, National Cancer Institute, National Institutes of Health, U. S. Public Health Service, Department of Health, Education and Welfare, 1948. Appointed Assistant Surgeon General, U. S. Public Health Service, 1957. He holds membership in numerous scientific societies including: American Cancer Society, Director-at-large, 1948 - present. American Venereal Disease Assoc., (President - 1948). International Union Against Cancer, Chairman, Cancer Control Commission, 1958-1962. International Association Against Venereal Disease, Vice President and technical consultant, 1947 - present. Public Health Cancer Association, (President, 1956-57). Alpha Omega Alpha, Honorary Membership, 1958. Arcas of Professional Interest: Medical research administration, Public Health administration, Epidemiology, International cancer control, Venereal disease control and Medical education.

#### *H. RAWLING PRATT-THOMAS, M. D.*



Dr. Pratt-Thomas was born in Barnsley, England, in 1913. He was reared in Sumter County, South Carolina, and received his A. B. degree from Davidson College in 1934 and his M. D. de-

gree from the Medical College of South Carolina in 1938. He received his internship and residency training at the Cincinnati General Hospital. He is a

member of the American Medical Association, College of American Pathologists, and American Association of Pathologists and Bacteriologists. He is a former chairman of the Section of Pathology of the Southern Medical Association. He is past president of the Charleston County Medical Society and the South Carolina Society of Pathologists. He is a diplomate of the American Board of Pathology and is the consultant in pathology at the Charleston Naval Hospital. He has written some thirty-five scientific articles and is a member of the National Honorary Scholastic Medical Society, Alpha Omega Alpha. Dr. Pratt-Thomas is Professor of Pathology at the Medical College of South Carolina. His chief interests besides teaching are in diagnostic pathology and cytology with research activity directed toward the field of neoplasia and cardiovascular disorders.

#### *JOHN C. HAWK, JR., M. D.*



College Education: St. John's University, Shanghai, China, 1934-35; Emory and Henry College, Virginia, 1935-1938, B.A., B.S. Medical School: University of Virginia, M. D., 1942. Internship: Internal

Medicine: Strong Memorial Hospital, Rochester, N. Y. 1942-43. Military Service: U. S. Army, 1943 to 1946. Foreign service, CBI Theatre. Additional Post-Graduate Training: Fellow in Pathology, University of Virginia, 1946-47; Assistant Resident, Surgery, University of Virginia, 1947-49; Special Fellow in Surgery, Memorial Center for Cancer, New York City, 1949-50 (Damon Runyon Fund); Chief Resident in Surgery, University of Virginia, 1950-51 (American Cancer Society Clinical Fellowship). Present Position: Coordinator of Cancer Teaching, Director of Cancer Clinic, Associate Professor of Surgery, Medical College of South Carolina, July 1951 to present date. Certification and Membership: American Board of Surgery, December



1951; Fellow, American College of Surgeons; American Medical Association; The James Ewing Society; The American Radium Society.

---

*J. BROWN FARRIOR, M. D.*



J. Brown Farrior, M.D., otologist, Tampa, Florida is head of the Residency Training program in otolaryngology at Tampa General Hospital and St. Joseph's Hospital, Tampa, Florida, and consultant in otolaryngology at Veterans Administration Hospital, Bay Pines, Florida.

Dr. Farrior was formerly assistant professor of otolaryngology at Tulane University; otologist at the Ochsner Clinic, New Orleans; consultant in otology, New Orleans Ear, Nose and Throat Hospital; instructor and resident in otolaryngology at the University of Michigan Medical School; resident in otolaryngology at Roosevelt Hospital, New York City; chief of the otolaryngology section—University of Michigan Affiliated Unit; and regional consultant in the European Theater of Operations (ETO).

Dr. Farrior is recipient of the Award of Merit for his work with the American Academy of Ophthalmology and Otolaryngology. His scientific exhibits on ear surgery have received many awards from the American Academy of Ophthalmology and Otolaryngology, the American Medical Association, and the Southern Medical Association.

---

*WILLIAM T. GREEN, M. D.*



Dr. Green received his M. D. from Indiana University and then had his residency training at Indiana University Hospital, Henry Ford Hospital, Peter Bent Brigham Hospital (Boston) and the

Children's Hospital (Boston). He held various appointments and academic ranks up to Orthopaedic Surgeon in Chief at The Children's Hospital and the Peter Bent Brigham Hospital, which positions he now holds. He is also Clinical Professor of Orthopaedic Surgery and Co-Head of the Department at the Harvard Medical School. Past-President of the American Academy of Orthopaedic Surgeons; past-President of the American Academy for Cerebral Palsy. He is a member of many medical societies and author of approximately 75 scientific papers.

---

*EDWIN BOYLE, JR., M. D.*



Born 1923, Sumter, South Carolina. Education: 1943—University of North Carolina (B. A.); 1945—University of North Carolina (Certificate in Medicine); 1947—Jefferson Medical College (M. D.); 1947-8—

Philadelphia General Hospital, Rotating Intern; 1948-9—Watts Hospital, Durham, N. C., Assistant Resident in Medicine; 1949-51—University of Virginia Hospital, Resident in Medicine, Postdoctoral Fellowship, National Heart Institute; 1951-55—National Institutes of Health; Senior Clinical Investigator, Section on Metabolism, National Heart Institute; 1956—Established Investigator, American Heart Association; 1956—Director, Lipid Metabolism Laboratory, Associate in Medicine, Medical College of South Carolina. Scientific Societies: Alpha Epsilon Delta, University of North Carolina; Phi Chi Medical Fraternity, Jefferson Medical College; Member, Hare Medical Society, Jefferson Medical College; Member, Blockley Medical Society, Philadelphia General Hospital; Member, American Heart Association; Member, United States Public Health Service Clinical Society; Member, American Society for the Study of Arteriosclerosis; Member, Society of Experimental Biology and Medicine; Councillor, Medical College of South Carolina; Member, American Diabetes Association.



*J. MANLY STALLWORTH, M. D.*



Born: Greenwood, South Carolina, July 20, 1919. Education: Clemson College 1936-1940, B. S. Degree. Medical College of S. C. 1940-1943, M. D. Degree. Internship, Roper Hospital, 1944, Surgery Residency:

Roper Hospital and the Medical College of South Carolina, 1946-1951. Army Service: Medical Corps 1944-1946. Served in the European and American Hospitals. Hospital Affiliation: Roper Hospital, Medical College Hospital, St. Francis Xavier Hospital. Teaching Position: Assistant Professor of Surgery, Medical College of South Carolina. Director of the Vascular Laboratory and Clinic. Board Affiliation: Diplomate, American Board of Surgery.

---

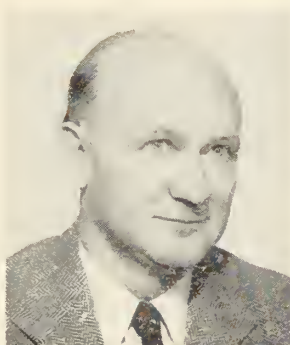
*THOMAS FINDLEY, M. D.*



Dr. Findley holds an M. D. degree from the University of Chicago (Rush) followed by an internship at the University Hospital in Philadelphia, by residency training at the University Hospital in Ann Arbor,

by three years of research in renal physiology at the University of Pennsylvania, by six years of private practice in St. Louis with a part-time affiliation at Washington University School of Medicine, and then by twelve years at Tulane Medical School and The Ochsner Clinic where he was Head of the Medical Section. In 1954 he came to the Medical College of Georgia as Director of the Georgia Heart Association Laboratory of Cardiovascular Research and last year became Chairman of the Department upon Dr. Sydenstricker's retirement.

*R. P. WALTON, M. D.*



Professor of Pharmacology and Therapeutics, Medical College of South Carolina. Birthplace, Guthrie, Kentucky, 1905, Ph. D. (Organic Chemistry) Columbia University, 1929; M. D. University of Chicago,

1941. Previous staff appointments in Departments of Pharmacology, medical schools of Tulane University, University of Mississippi, University of Chicago, University of Tennessee, 1929-1942. Medical College of South Carolina since 1942. Past and present committees and offices: American Society for Pharmacology and Experimental Therapeutics, Treasurer, 1951-54; National Board of Medical Examiners, special committee on Pharmacology; Association of American Medical Colleges, formation of Medical Audio-Visual Institute; Committee on Shock, National Research Council; Collaborating Editor, Archives Internationales de Pharmacodynamie et de Therapie; Associate Editor (cardiovascular) Journal of Pharmacology and Experimental Therapeutics.

---

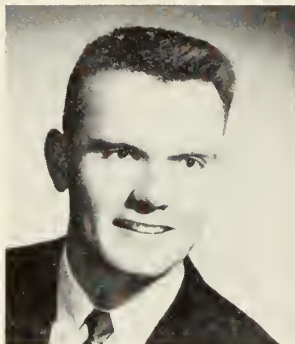
*VICTOR A. POLITANO, M. D.*



Assistant Professor of Urology, Duke University Medical Center. Former Instructor in Surgery, Harvard Medical School and Associate Urologist Massachusetts General Hospital. Graduate: Duke University

School of Medicine, 1943. Member: A. M. A., American Board of Urology, Southeastern Section, A. U. A., Diplomate National Boards. Author of several papers on urologic problems in children.

WALTER A. MURRAY, JR., M. D.



Dr. Murray is a native of Knoxville, Tennessee. He attended Columbia College, N. Y. C., where he obtained A. B. degree in 1952. Graduated Cornell Medical School 1955. Interned one year at Cincinnati General Hospital before spending 2 years in the Epidemic Intelligence Service of the Communicable Disease Center U. S. Public Health Service, Atlanta, Georgia, where he was Assistant Chief of Surveillance Section primarily involved with studies of staphylococcal and encephalitic disease problems. The past year he has been a Resident in Pediatrics at the Childrens Hospital of the Ohio State University Medical Center, Columbus, Ohio.

E. DUBOSE DENT, JR., M. D.



Pre-medical Work: Presbyterian College, Clinton, South Carolina. Medical School: Medical College of South Carolina. Internship: U. S. Naval Hospital, Philadelphia, Pa. Residency in Anatomical and Clinical Pathology: U. S. Public Health Service Hospital, Baltimore, Md. Special Training: Hematology—Johns Hopkins Hospital, Dr. C. L. Conley. Immunology: Johns Hopkins School of Public Health. Neuropathology—University of Maryland Medical School, Dr.

J. A. Wagner. Parasitology—Communicable Disease Center, Chamblee, Ga. Legal Medicine and Toxicology—Office of the Chief Medical Examiner for the State of Maryland. Diplomate: American Board of Pathology in Pathologic Anatomy and in Clinical Pathology. Fellow: College of American Pathologists and American Society of Clinical Pathologists. Member: South Carolina Medical Association and Columbia Medical Society. Previous Positions: 1. Deputy Chief, Department of Pathology, U. S. Public Health Service Hospital, Baltimore, Md. 2. Chief, Department of Pathology, U. S. Public Health Service Hospital, Norfolk, Virginia. 3. Associate Pathologist, Columbia Hospital, Columbia, S. C. 4. Pathologist, South Carolina Baptist Hospital, Columbia, S. C. Dr. Dent was with the U. S. Public Health Service for seven years before coming to Columbia and attained the rank of Senior Surgeon (Lt. Colonel). Author of several scientific papers.

ROBERT WILSON, M. D.

Dr. Robert Wilson, whose picture is to be seen elsewhere in this number in his capacity of Secretary of the Association, also appears on the program. He was born in Charleston, May 3, 1905, graduated in medicine at the Medical College of South Carolina in 1930. He had hospital appointments at the University Hospital, Baltimore, Maryland and the Boston City Hospital and has been in the practice of Internal Medicine in Charleston since 1933. He has been on the faculty of the Medical College since that time and is now Clinical Professor of Medicine. He was certified by the American Board of Internal Medicine in 1942, and has been a Fellow of the American College of Physicians since 1938.





DR. GUNNAR GUNDERSEN  
BANQUET SPEAKER

---

#### A PROFILE OF THE A.M.A. PRESIDENT

San Francisco—Dr. Gunnar Gundersen, 61-year-old surgeon from LaCrosse, Wis., was inaugurated Tuesday, June 24 as the 112th president of the American Medical Association.

As president, Dr. Gundersen has served as spokesman for more than 170,000 physicians who are members of the A.M.A., a non-profit, scientific, and public service institution, which was organized to protect the public health and to promote the highest quality of medical care for the American people.

Dr. Gundersen, born in LaCrosse on April 6, 1897, began the private practice of medicine in 1922 as an associate of his father. He now operates the Gundersen Clinic in LaCrosse, along with three of his physician brothers, Sigurd B., Alf H., and Thorolf E.

Gundersen and Dr. Sven M. Gundersen, are practicing in Boston and Hanover, N. H., respectively. Two other physician brothers, Dr. Trygve

The Gundersen Clinic, which handles 3,000 to 4,000 new patients a year, was established in 1927. It attracts people from all over the United States and is operated in conjunction with the LaCrosse Lutheran Hospital next door. In memory of their father, the Gundersens established the Adolf Gundersen Medical Foundation in 1945. This non-profit organization grants fellowships to young doctors for advanced study in specialized fields, provides facilities and modern equipment for such studies, conducts investigations into the many unsolved problems of medicine and surgery, and provides free diagnostic services to indigents with complex medical problems.

Dr. Gunnar Gundersen did his preparatory school work in Oslo, Norway, and returned to



the U. S. to obtain his B.S. degree at the University of Wisconsin in 1917, and his M.D. at Columbia University in 1920. He served his internship and residency at LaCrosse Lutheran Hospital from 1920 to 1922.

Like his father and his brothers, he has been active in state and national medical affairs throughout his practice. He was president of the State Medical Society of Wisconsin for the year 1941-42, served on a number of the society's committees, and was speaker of its House of Delegates for about five years. He was a member of the A.M.A.'s House of Delegates in 1937 and 1938, and was elected to the A.M.A.'s Board of Trustees in 1948, serving in various capacities ever since. He became chairman of the Board in June 1955.

Dr. Gundersen's keen interest in hospital affairs and the quality of hospital service led to his election as the first chairman of the Joint Commission on Accreditation of Hospitals when it was formed in 1951. He served in that capacity until 1953.

He is past president and former member of the Wisconsin Board of Health (1943-52), and a former member of the State Board of Re-

gents of the University of Wisconsin (1931-37).

Currently he is preceptor in charge of the medical students who come up from the University of Wisconsin to the Gundersen Clinic to augment their training by actual contact with patients and other physicians.

Dr. Gundersen is a diplomate of the American Board of Surgery, a fellow of the American College of Surgeons and the International College of Surgeons, a member of the Council of the World Medical Association, and a member of the American Public Health Association.

Dr. and Mrs. Gundersen have three children and eight grandchildren. The older son, Gunnar Adolf, a graduate of Harvard Medical School and a certified radiologist, is now associated with the Gundersen Clinic. The younger son, Cameron B., was graduated from Boston University Medical School in 1956, recently completed his internship at Children's Hospital in San Francisco, and is at present serving as captain in the Air Force Medical Corps at McGuire Air Force Base, N. J. The Gundersens' daughter, Mary, lives with her lawyer husband in Oslo, Norway.

---

## Committee Reports 1958-1959

---

### REPORT OF THE COMMITTEE ON CANCER

Expansion of the facilities for uterine cytology and the increasing availability of such examinations to the physicians of South Carolina is one of the bright spots in the cancer control program. Most authorities agree that the widespread use of cervical or Papanicolaou smears as a screening device for the detection of carcinoma-in-situ will materially decrease the mortality from carcinoma of the cervix.

The pathologists that serve in the eight general hospitals in South Carolina are all examining cervical smears. Each of these pathologists states that the number of cases are steadily increasing and a survey of the statistics from these hospitals indicate that a minimum of 30,000 cases are being screened annually. This is a marked contrast to ten years ago when the first few examinations of this type were performed. The fact that these examinations are being performed throughout the state proves that these facilities are

available to all physicians and their patients if they care to take advantage of this opportunity.

It is interesting that this program is expanding with a minimum of subsidization. It is true that some of the programs are being assisted by such agencies as The State Board of Health, The American Cancer Society, and private endowments, but that many are paying their own way. It is believed that a balance between governmental and agency support for those who cannot pay and support of the program by payment from those who are financially secure is a desirable and healthy situation.

It is anticipated that this program will steadily accelerate to the betterment of the people of South Carolina.

H. R. Pratt-Thomas, M. D.,	James R. Young, M. D.
Chairman	Percy D. Hay, Jr., M. D.
Thomas A. Pitts, M. D.	Sammel H. Fisher, M. D.
Alton G. Brown, M. D.	

## INSURANCE COMMITTEE

Your Insurance Committee met several times during the year to consider the advisability of sponsoring a professional liability (malpractice) insurance program.

Several companies were contacted through Mr. M. L. Meadors' office among them the American Insurance Company which is writing this type of insurance for the American Academy of General Practice under the so called P-L-U-S Plan. Also the Continental Casualty Company was contacted. Neither of these were sufficiently interested to offer us a program for consideration.

The only company which has offered us a concrete proposal was the St. Paul Fire and Marine Insurance Company, and the St. Paul Mercury Insurance Company which will hereafter be referred to as the St. Paul Companies. We have found this to be a reliable company which has been writing professional liability insurance for physicians since 1935. They have agreed to review any cases which come up with our State Grievance Committee and any local committee which the State Association sees fit to set up. The company provides attorneys mutually agreeable to the Company and the State Association. At the end of thirty-six months and thereafter, annually, they agree to review our premiums and revise them downward if that is possible. The original premium will be based on the standard amount charged by other insurance companies insuring in this area on an individual basis. This company does not require any percentage of the State Association to subscribe before the policy is in effect. In other words, this company will write this type of insurance on an individual basis.

Other advantages that this company offers over companies that insure the larger groups such as the American Academy of General Practice and the American Academy of Ophthalmology and Otolaryngology is that a representative is maintained in this state who has a better knowledge of local affairs than one more remotely located. Also the only exclusion in this policy is a Workman's Compensation Clause which states that if the individual's beneficiary elects to accept the standard death benefit of \$10,000.00 as provided by Workman's Compensation, the policy is not in effect. If an attempt is made to collect from both, the Workmen's Compensation death benefit is withdrawn.

In return for the above, all that the St. Paul Companies ask is that the State Association approve this program through its House of Delegates and write its members to that effect giving them the salient features of the program in the letter. Your Committee recommends such a decision.

R. W. Hancel, M. D., Chairman

Frank C. Owens, M. D.

Clay W. Evatt, M. D.

## REPORT OF THE ADVISORY COMMITTEE TO THE WOMAN AUXILIARY

This committee has not had occasion to meet during the past year, but has stood ready and willing to assist the Auxiliary in any way possible.

F. G. Cain, M. D., Chairman

## RURAL HEALTH COMMITTEE

After receiving a notice that I had been appointed on that Committee, I attempted by inquiry to learn the duties of this committee. Apparently the conditions in Rural Health had been so well taken care of that none of my inquiries could inform me the particular duties of this committee; therefore, this committee has no formal report to make.

Keith Sanders, M. D.

## COMMITTEE ON HISTORICAL MEDICINE

The Committee in Historical Medicine has continued to search for material for a history of medicine in the state. There is now an accumulation of data which will make the foundation of such a history. Plans are made to proceed with beginning of writing in the near future.

The Committee again requests the sum of \$500. to be added to the money in hand, all of which will be returned to the Association if the history does not materialize.

J. I. Waring, Chairman

## COMMITTEE ON CIVIL DEFENSE

Your Committee has very little to report except that we have tried to keep the few sparks alive that have been engendered over the past few years, and where possible, made an earnest effort to try to start more (without much success). We have endeavored to keep those of the profession informed of the efforts being made to organize Civil Defense, and of the various meetings that are being held from time to time. There are two very important meetings that are held each year by the Council on National Defense. One of these is held just prior to the June meeting of The American Medical Association, and the other is the County Medical Societies' Civil Defense Meeting which is held each November at Chicago. We have been unable to get men to attend these meetings, except on rare occasions.

Another factor that has entered into the lag of the work in this state has been the re-organization (and I say that advisedly since the previous organization was atrocious) of the Civil Defense on the state level. As you know, the Legislature passed a bill at the 1958 session, creating a separate department of the state government for Civil Defense under the direct supervision of the Governor. This went into effect the first of 1959, and Governor Hollings very wisely appointed Mr. Charles Culbertson of Laurens, S. C. to head up this new department. Mr. Culbertson has had experience in state affairs, and already has shown more

interest in Civil Defense, than has been shown in many moons.

Mr. Culbertson and your committee chairman have had several conferences, and we are planning at the present time to have a meeting sometime in the near future in Columbia to try to get the interest going in Civil Defense that should be in this state. Certainly, to your committee the future of this greatly needed work in this state has never had a more bright outlook than at the present time, and we believe that we are definitely on the way to a good and lasting state organization.

R. Y. Westcoat, M. D.  
Bachman S. Smith, Jr., M. D.  
William C. Herbert, Jr., M. D.  
Charles N. Wyatt, M. D., Chairman

#### COMMITTEE ON AMERICAN MEDICAL EDUCATIONAL FOUNDATION

Your Committee is very proud to announce that the contributions to the A.M.E.F. from South Carolina this year have increased some 250%. An all out effort has been made to contact the entire membership of the state Medical Association. We were successful in this endeavor by writing to all county secretaries soliciting their support for the A.M.E.F. and then writing a reminder card to our members who had overlooked this request to make their contribution. Finally, another reminder card was sent asking again for their contribution. We had about 70% response on these requests. It was obvious to us that more publicity must be given this important project if we are to reach the number of contributors this state should produce.

Dr. Keitt Smith and Dr. John Arthur Seigling (Committee members) attended the annual meeting in Chicago in January and both appeared on the program. The South Carolina plan adopted by the faculty of our Medical school was again discussed and much praise given to the faculty members for their generous contributions.

J. Howard Stokes, M. D., Kirby Shealy, M. D.  
Chairman John Arthur Seigling M. D.  
Keitt Smith, M. D.

#### COMMITTEE ON INFANT AND CHILD HEALTH

The Committee on Infant and Child Health has met only once during this year at which time it was decided to continue the study of neonatal deaths in certain hospitals which plan was instigated by the committee last year. This study is involving the following hospitals: Roper Hospital, Medical College Hospital, Columbia Hospital, Greenville General Hospital, Self Memorial Hospital, Cherokee County Hospital, McLeod Infirmary, Spartanburg General Hospital, and Marion Memorial Hospital.

An effort to keep up with this study has occupied the chairman to the point that he has been unable to foster any further action of the committee as a whole.

Before the Convention meets in May, it is hoped the committee can get together and determine the possible value of this study and make recommendations as to the future course of the committee.

On March 5, 1959 the committee met and discussed further the pending bill on adoptions which we had felt was certainly to get out of committee during this session of the legislature. However, we have learned that this is probably not the case, and Dr. Adams is pursuing through the judiciary committee the idea of getting this bill on the floor for possible passage.

It is hoped that we will soon have a meeting with various of the State Board of Health officials and members of the committee relative to bringing up to date the program of immunization as now outlined and sponsored by the State Board of Health.

The major portion of the meeting on March 5th was devoted to discussion of the neonatal death study now being done in ten hospitals over the state. In general it is felt that the response has been quite good though it is still a rather difficult job to get the completed forms in at an early date. The present committee feels very strongly that the study should be continued by succeeding committees. When certain information is gotten together by Mr. Thomas P. Lesesne, statistician of the State Board of Health, this will be transmitted for possible publication in the Journal of the South Carolina Medical Association.

The committee requests the House of Delegates of the South Carolina Medical Association to change Section 9 of the By-Laws in its entirety to read as follows:

Section 9 "The Committee on Infant and Child Health shall consist of nine members who, after the initial terms, shall be appointed to serve for terms of three years each. After the initial appointments three members, one nominated by each organization named below, shall be appointed for a term of three years. No member may succeed himself or herself. Three members of the committee shall be general practitioners and shall be nominated by the South Carolina Academy of General Practice, one initially for a one year term, one for a two year term, and the other for a three year term; three members shall be specialists in obstetrics or in obstetrics and gynecology and shall be nominated by the South Carolina Obstetrical and Gynecological Society, one initially for one year term, one for a two year term, and the other for a three year term; and three members shall be specialists in pediatrics and shall be nominated by the South Carolina Pediatric Society, one initially for a one year term, one for a two year term, and the other for a three year term; provided, however, that should notices of such nominations not be received by the Secretary of the Association before adjournment of the annual meeting of the Association the President shall select the members of the committee without such nomination or nominations. The committee shall



organize and elect its own officers, the chairman shall be one of the specialists in pediatrics."

It is felt by the committee that the organization of the committee along the lines stated above and the following of this by the officers of the South Carolina Medical Association will add greatly to the workability of the committee and give it some degree of permanence. Though the committee has been specified to be made up of five members who serve two year terms, the past two presidents have ignored this and have appointed the committee as they saw fit.

In addition the present committee would like to recommend to the ensuing committee that the membership of the committee might be enlarged beyond the above official members by invitation from the chairman and/ or other committee members. Also the neonatal death study be continued and, if possible, other hospitals be invited to participate in this study starting in January 1960. Also that the *Journal of the South Carolina Medical Association* be used to inform the general physicians of this study and the results of the tabulation as made from time to time. Also that the committee meet four times a year to study the neonatal death reports and to make recommendations where such seems to be pertinent. Also that an effort be made to secure some doctor who would do detail study with some financial assistance possibly from the Medical Association for clerical services. Also that an effort be made to get a panel on "Perinatal Mortality" at the 1960 meeting of the South Carolina Chapter of the Academy of General Practice. Also that more emphasis be put on the training of personnel, physicians and nurses, in premature work at the Cornell Medical Center in New York. This can be done through scholarship funds available at the Maternal and Child Health Division of the State Board of Health.

With the potential increase in the neonatal death study, the committee requests that \$300 be allocated to the committee for its work in the next year.

Walter Moore Hart, M. D.

#### SCHOOL HEALTH COMMITTEE

The School Health Committee of the State Medical Association had a meeting at the State Health Department in May of 1958. A representative from each Medical Society in the state was invited, and transportation and per diem were paid by the Maternal and Child Health Division of the State Board of Health. It was reported at this meeting that of the 40 Medical Societies in the state, 22 have School Health Committees. Eleven of these were represented at the meeting in addition to the representatives of the State Health Department and the members of the State School Health Committee.

Subjects discussed included dental hygiene and education in prevention of dental disease, School Health Insurance, emergency service for accidents and sudden illness, specialized follow-up clinics to meet various medical needs, and special screening

tests to be performed by school nurse or school teacher, such as vision screening test, etc. In addition to these subjects, Dr. Henry Moore, the acting chairman of the State School Health Committee and the chairman of the Richland County School Health Committee presented some remarks on the objectives and methods of implementing School Health through the activities of local School Health Committees. Specifically, he presented the program of the Richland County School Health Committee to the group.

The School Health Committee also met on August 8th, 1958 in Columbia. This meeting occurred on the day that the South Carolina Coaches Association met in Columbia, and Drs. Moore and Paul addressed the coaches meeting on the subject of "Physical fitness Programs in Schools", pointing out particularly some of the dangers of introduction of contacts sports into the physical fitness program for children under the age of 14. These remarks were well received by the coaches and heartily endorsed by a majority of them.

The regular committee meeting took place in Dr. Sheriff's office following the meeting with the coaches association. At this meeting there was considerable discussion of the vision-screening program, the hearing-screening program, and certain aspects of health education and physical fitness education programs in schools.

The School Health Committee would like to announce that it plans a state-wide meeting again this year, and the meeting will be held in Columbia at the same time as the meeting of the House of Delegates of the State Association. The State Committee is particularly anxious to have as large a representation as possible of representatives from the local Medical Societies who are interested in this very vital activity of organized medicine. The Maternal and Child Health Division of the State Board of Health has again agreed to pay for transportation of delegates to Columbia and their expenses for the day of the meeting.

Respectfully submitted,  
J. R. Paul, Jr., M. D., Chairman

#### STANDING COMMITTEE ON WELFARE AND REHABILITATION

As a background of this report, this committee replaces as a standing committee the former committee of the South Carolina Medical Association entitled The Committee on Indigent Care. Provisions for this new committee were made by an amendment to the Constitution and By-Laws at the annual meeting of the Association in May, 1958. This five member committee appointed by the president was assigned the responsibility of adviser and liaison to the several agencies in the field of welfare, rehabilitation, and care of the medically indigent. The committee was named as follows: Dr. Angus Hinson, Rock Hill, one year term; Dr. John A. Siegling, Charleston, two year term; Dr. John K. Webb, Greenville, three year term; Dr. Roderick Macdonald, Rock

Hill, four year term; and Dr. Ben N. Miller, Columbia, five year term.

The annual meeting of the committee was held on March 8, 1959, in Columbia. The following members were present: Dr. Angus Hinson, Dr. John A. Siegling, Dr. Roderick Macdonald, and Dr. Ben N. Miller, Dr. John K. Webb could not be present because of pressing responsibilities at home.

In the organizational meeting, Dr. Ben N. Miller was elected chairman and presided over the remainder of the meeting.

Due cognizance was taken of the several state agencies dealing with welfare and rehabilitation. A detailed list of the facilities and projects of the agency for rehabilitation was furnished the members of the committee. The committee recommended the general philosophy of stressing rehabilitation of the indigent to take precedence over the matter of pure welfare support.

The problem of matching federal funds with state appropriations for rehabilitation and welfare was generally discussed. It was felt that where proof of need for funds is shown and where facilities for administering these funds properly prevailed that appropriations of state funds in order to secure federal matching funds should be encouraged. Some moderation in judgment is solicited for the protection of the taxpayers and the budget in general.

The matter of multiple solicitations for support of medical care and research was discussed. It is realized that this phase of solicitation is getting out of hand, and some type of package solicitation for medical purposes should be worked out either in conjunction with the United Fund drives in the communities or separate united medical fund solicitation. It is recommended that this be studied and worked out on a local level.

As provided for in the provision of the By-Laws, it is realized that the work of this committee is wide in scope. If properly applied, it can do much to improve the knowledge of the Association in general regarding welfare and rehabilitation problems and can act as a liaison and adviser to the several agencies regarding medical activities.

Respectfully submitted,

Angus Hinson, M. D.      Roderick Macdonald, M. D.  
John A. Siegling, M. D.    Ben N. Miller, M. D.,  
John K. Webb, M. D.      Chairman

#### COMMITTEE ON INDUSTRIAL HEALTH

At the 1958 annual meeting of the South Carolina Medical Association the Reference Committee on Public and Industrial Health recommended that the President of the Association bring to the attention of the Governor of South Carolina discrepancies in the administration of the Workmen's Compensation Act by the South Carolina Industrial Commission. This was approved by the House of Delegates and the Committee on Industrial Health was charged with the responsibility of obtaining evidences of dis-

crepancies. It was decided that such would be delivered to the in-coming Governor (Hollings) after January, 1959. In the meantime, other state organizations, e.g., The South Carolina State Chamber of Commerce, were planning the same course of action. Representatives of the Committee on Industrial Health were requested to meet with these organizations regarding this problem, and on January 23, 1959 this meeting was held in Columbia. A planning Committee was developed from this group, and this Committee will deliver recommendations personally to the Governor. Since the Committee is more influential as a group than one acting alone, it is recommended and moved that the President of the South Carolina Medical Association be relieved of this directive and that follow-up in this respect be left with the group committee of the South Carolina State Chamber of Commerce which includes a representative of the medical association.

The 21st annual Accident-Prevention Conference sponsored by the South Carolina Industrial Commission was held in Columbia on November 5 & 6, 1958. Members of this Committee again joined with the Industrial Medical Society of South Carolina in presentation of the Doctors' Section program which was well-attended by representatives from Industry and the Industrial Commission.

In January, 1959, request was received from the South Carolina State Chamber of Commerce to meet with the representatives from the State Chamber of Commerce, the South Carolina Textile Manufacturers Association, the State Development Board, and insurance companies, regarding a new Workmen's Compensation Medical Fee Schedule which had been submitted to the Industrial Commission. The Industrial Commission had scheduled a public hearing in its regard on February 26, 1959. The above group had studied the schedule as submitted and was of the opinion it was out-of-line with charges made for similar cases in private practice in many instances. Too, it was felt that the comparative fees of competitive states, especially Georgia and North Carolina, had not been consulted by those making the schedule. It was proved that medical fees paid per case in South Carolina are highest of the Southern States. This, plus the efficiency of administration of the Workmen's Compensation Act, could have a definite bearing on new industrial development in South Carolina. On January 23, 1959, the committee met with the above group. It was thought that the members in general of the general medical profession would not agree with the new proposed fee schedule if given the opportunity to study it. The president of the South Carolina Medical Association was requested to ask for a delay in the hearing before the Industrial Commission. There was no evidence found whereby such fee schedule was authorized to be presented to the Industrial Commission by the South Carolina Medical Association. Council had approved the schedule at its meeting on November 19, 1958, but had



taken no further action, and no authorization was recorded by the House of Delegates. Therefore, Dr. R. L. Crawford requested delay in the hearing until action could be taken at the meeting of the House of Delegates in May, 1959. It was planned in the meantime for a committee from the South Carolina Medical Association to meet with a committee from the above lay group and to make a more complete study. Delay was initially refused by the Industrial Commission but upon later consideration the hearing was cancelled. Although no new date was set for the hearing, a meeting of the committees is to be held for complete evaluation of the fee schedule. It is hoped a new schedule acceptable to all will be available for presentation to the House of Delegates at the annual meeting.

The meeting of the Council on Industrial Health of the American Medical Association with the Chairmen and members of the State Committees on Industrial Health was held in Cincinnati, Ohio, on February 16th, 17th, 18th, 1959.

This meeting was attended by Drs. J. L. Hughes and John M. Perry, Jr., of this Committee representing the South Carolina Medical Association. Of particular importance in this meeting was the consideration of policies governing the practice of Medicine in Industry. The Council on Industrial Health recommends that particularly in areas where there is friction or objection to procedures being done a code of practice principles and professional relationship be devised. Such a code can be devised at local society level or state level. References in this respect include "Guiding Principles of Occupational Medicine" as published by the Council on Industrial Health, American Medical Association, in 1954, a similar brochure "The Scope of Industrial Medicine" published in 1957, and the standards set forth by the Occupational Health Institute and the Industrial Medical Association. The Council also recommends that State Committees on Industrial Health deal with Workmen's Compensation problems and legislation referable to occupational health and be consultants for Industry in the State as well as physicians engaged to any degree in industrial practice when requested. Impartial medical testimony being most important in Workmen's Compensation and liability court procedures, the Council recommends that a panel of medical experts be formed to render impartial medical examinations and testimony and that this panel be certified by the state Medical Association. The Council states that a physician who always testifies on one side of a case, whether defendant or claimant, is not capable of impartial medical testimony. Physicians are members of the most-respected profession and must conduct themselves accordingly. Medical testimony can admit an honest difference of opinion, but repeated partisan testimony by a physician arouses suspicion of intent, and, where intent is found to be for personal gain alone, then censuring is in order. This should be done when indicated at the local

society level, but can progress to the state Association level. The 1960 meeting of the American Medical Association's Council on Industrial Health will be held in Charlotte, North Carolina, and the South Carolina Committee on Industrial Health will be called upon for assistance.

In the Journal of the American Medical Association, September 27, 1958, pages 475-488, was published the Guide to the Evaluation of Permanent Impairment of the Visual System by the Committee on Medical Rating of Physical Impairment of the American Medical Association. This guide should assist physicians performing disability evaluation examinations.

Respectfully submitted,  
John M. Perry, Jr., M. D., Chairman  
J. L. Hughes, M. D., Member  
Leon Poole, M. D., Member

#### LEGISLATIVE AND PUBLIC POLICY COMMITTEE

The Legislative and Public Policy Committee of the South Carolina Medical Association consists of the following:

Joseph J. Converse	-----	Greenville
George W. Price	-----	Spartanburg
Alton G. Brown	-----	Rock Hill
Henry C. Robertson	-----	Charleston
George Orvin	-----	Charleston
Tucker Weston	-----	Columbia
Ex-Officio:		
Mr. M. L. Meadors	-----	Florence

This committee has functioned during the past year through meetings, conferences, and interchange of letters and telephone calls. Several matters have demanded attention.

There has been some possibility of a bill being introduced in the Legislature concerning standards for psychologists, which bill might permit psychologists to practice medicine. As of today, this bill has not been introduced and the committee is observing a "watchful waiting" attitude in this matter.

A proposed bill which would result in the reinstatement of certain naturopaths appeared to be imminent. This bill was sponsored by a number of the Legislature who is a naturopath from Cherokee County. At this time the bill has not been introduced, and it may be that the gentleman who proposed this bill feels that he should not introduce it. The committee reaffirms the attitude that naturopaths should not be permitted to practice in South Carolina.

There has been a bill introduced in the House and sent to committee which would require that White and Negro blood be labeled separately when taken at the blood banks and preserved separately. For a number of reasons it was felt that this was impractical. Approximately 15,000 pints of blood are taken by Georgia and North Carolina blood banks from South Carolina border counties, and this blood is sent back to our state. Here quite a problem would



be presented. It was felt that this was not a good bill and that it would be wise that it be kept in committee. We appeared before a sub-committee of the House of Representatives, giving reasons why we felt the bill should not pass.

On the optometrist problem it appears that no bill has been introduced in the Legislature concerning this at the present time. However, the committee stands ready to work with the ophthalmologist on this matter. The question of reregistration was discussed for physicians every two years, and such bill meets the approval of the committee.

A special meeting was held for the discussion of a proposal for a basic science law for South Carolina and other matters. A recommendation from the Sumter-Clarendon County was read advocating such a law. Dr. Norman Eaddy appeared and presented views of the Sumter-Clarendon County Medical Society, giving reasons why such a law would be advantageous. Dr. George Wilkinson appeared before the committee discussing the problem. It was thought generally by the committee that such a basic science law had its value and further study would be given to this matter.

Recommendations of the Committee:

1. That there be reregistrations of physicians in South Carolina every two years.
2. That a special committee be appointed to study the problems of a basic science law in the State of South Carolina, and that the committee should report back to the House of Delegates or to the Council with a recommendation.

Frank C. Owens, Chairman

#### COMMITTEE ON LIAISON WITH ALLIED PROFESSIONS

There has been no activity whatsoever, and therefore no report—save a negative one—from the committee on Liaison with Allied Professions.

However, I had looked forward to a little activity because of my interest in the possible considerations of such a body. Still, there were no communications from the prior committee, nor any between the present committee or the "opposite" liaison group.

I have noted many articles in many medical publications, produced monthly in these publications, in regard to medico-legal cases. A body of burgeoning interest as yet without direction, is indicated; and apparently this Association's Liaison Committee does have much before it within some years. Perhaps "activation" of the committee by specific protocol from the governing body of the Association can be placed on the agenda of business in the near future.

I know of four cases of "malpractice" suits in this county (Kershaw) in the past several years. I had a direct communication from a "friendly" lawyer, within the last month, that he had an agenda of eleven (11) such suits, in Florence, S. C., in process.

An article in "*Medical Economics*" for March 1959, by a New York City attorney, entitled, "A Way to

Stop Most Malpractice Suits", shows some daylight on what the future of the Committee on Liaison between Professions must become concerned with. I have seen other articles like it, it is true; but highly recommend perusal of this article to interested parties; i. e., the South Carolina Medical Association.

This potential threat to doctors, of burgeoning suits, including many or most—which I consider merely legal blackmail, does need an organized responsiveness from the body of professional organization being attacked.

May the future committee have some chores to do,  
William R. LaRoche, M. D., Chairman

#### COMMITTEE ON AGING

On July 31, 1958, Dr. R. L. Crawford, President of the South Carolina Medical Association, appointed a "Committee on Aging". The members of this committee are Dr. F. E. Zemp, Columbia; Dr. Walter Mead, Florence; Dr. John F. Rainey, Anderson; Dr. T. G. Goldsmith, Greenville; Dr. W. N. Cochran, Spartanburg; Dr. J. P. Cain, Mullins; Dr. Robert Wilson, Charleston; and Dr. R. C. Smith, Conway, as chairman of the committee.

The chairman of the committee attended the A. M. A. Planning Conference in Chicago, Illinois, September 13 and 14, 1958.

The first meeting of the Committee on Aging of the South Carolina Medical Association was held in Columbia, South Carolina, at 11 a. m. Sunday, January 18, at the Blue Cross - Blue Shield headquarters. All members of the committee were present with the exception of two. Interested observers at this meeting were Mr. M. L. Meadors, Executive Secretary of the South Carolina Medical Association, Mr. William Sandow, Mr. David Dick and Mr. Starin of the South Carolina Blue Cross - Blue Shield Association, and Dr. Dechard Guess of Greenville.

The basic purposes of the South Carolina Medical Society's Committee on Aging are as follows:

1. To study the various aspects of the problems of aging, particularly as they relate to the provision of medical care;
2. To initiate programs and activities which will provide the medical profession with pertinent information from such studies, and
3. To furnish leadership in research and adding to community understanding of the aging process and its implications to the individual.

It is the further purpose of this committee to initiate activities and cooperate with other groups in efforts designed to meet the problems of the aged and to inform the profession and public of these problems and of their responsibilities in this field.

Actually one of the prime motivating factors behind the establishment and work of this as well as other state and national committees for the care of aging is the introduction in the House of Representatives of Bill HR-9467 by Mr. Forand, Congressman from the state of Rhode Island in 1958. This Bill was referred to the committee on Ways and Means.

"The Forand Bill", in essence, would provide hospital, nursing home and surgical care for beneficiaries of Social Security in the United States. It is felt by the American Medical Association that this bill represents a significant step in the direction of Federal Health Insurance.

It is deemed advisable to attempt in so far as possible to define the problem as it now exists and to attempt to work out some method of providing adequate medical and hospital care for the aged which would not be controlled by the Federal Government.

As to the present situation in South Carolina it is estimated that 8% of the population is age 65 or over. According to presently published population figures this would be approximately 175,000 people. It is estimated that by 1960 this figure will rise to 210,000 or more. It is thought that a large proportion of this group do not have any form of hospital or medical insurance and that many of those that are covered by some type of Health Insurance are inadequately covered.

The number of hospital beds in the state of South Carolina now designated specifically for chronic illnesses is only 71. There are slightly over 1000 beds available in nursing homes; but a majority of these beds are in institutions which do not meet the minimum requirements as outlined by the State Board of Health.

As far as can be determined a home visiting nurse program is present in only a few areas of the state and this field is largely undeveloped.

The committee is of the opinion that one of the most sensible methods of caring for many of the aged and certainly one of the cheapest plans would be the establishment of a well organized and coordinated home visiting nurse program. We believe that this should be set up and administered by the State Board of Health in cooperation with the private physicians throughout the state.

The committee believes that there should be an increase in the number of nursing homes which meet minimal requirements throughout the state. It is probably advisable that this should be done on a regional basis according to population centers without regard to geographical or political boundaries. This probably could be a state-operated system, supported partially by county and state taxes, in order to take advantage of available federal matching funds for construction of such facilities. The committee has been told that such matching funds have been available for some time; but because of lack of demand in the state of South Carolina for these funds they have been turned back to the Federal Government and have been used in other areas. Those existing privately owned nursing homes should be given a definite time limit to meet minimal standards and those which fail to do so should be closed.

Nursing home care is considerably cheaper than

chronic hospital beds attached to an existing general hospital.

The most important step of all, however, is adequate financing of the medical care of this age group. In this segment of our population the utilization rate for Health Insurance will be between three and four times that of the general population, and it is at this time that their income is diminishing. Present health insurance programs either will not or cannot adequately meet their needs at a price which most individuals can afford.

The committee has asked the Blue Cross-Blue Shield Corporation of South Carolina to draw up a plan for insurance of this age group for presentation to the House of Delegates of the South Carolina Medical Association.

In order for such an insurance program to be offered at a price that the aged can afford it will be necessary for the medical profession to agree to accept lower fees for this particular age group. The committee feels that this should be done through the existing Blue Cross-Blue Shield organization and also the committee believes that this type of policy should include nursing home as well as hospital care. It is realized that a definite ceiling will have to be put on the income level of those individuals offered this insurance program. It is also assumed that many of the aged will be financially unable to afford even this type of insurance. In such circumstances it would seem desirable to give serious consideration for the Department of Public Welfare to be requested to take out such insurance on the aged indigent in their counties.

It cannot be emphasized too strongly that in this present situation it is not enough for the Medical Association to simply say that it is against federal health legislation such as is envisaged in the Forand Bill. The pressure in Congress for such legislation has been reported to us to be reaching astounding proportions, not only from the aged individuals themselves, but from labor unions and other groups across the country.

It is absolutely necessary that the medical profession offer a counter proposal which will encompass reasonable care for this age group. If this is not done there is adequate reason to believe that the first phase of Federal Health Insurance will soon be enacted into law, and after that it is only a matter of time before the other barriers will fall, one by one, and we shall have a truly National Health Insurance program administered by the Federal Government.

R. C. Smith, M. D.

---

#### THE MATERNAL HEALTH COMMITTEE

The maternal deaths in South Carolina for 1957 have been subjected to statistical analysis. The deaths occurring in 1958 are currently being analysed.

The following is a list of maternal deaths by cause in South Carolina for 1957.

	White	Colored	TOTAL	
Uterine Hemorrhage				16
Abruptio with fibrinogen depletion	2	1	3	
Abruptio without fibrinogen depletion		2	2	
Postpartum atony	1	5	6	
Rupture of uterus		1	1	
Retained placenta		3	3	
Placenta previa		1	1	
Ectopic Pregnancy	0	5	5	5
Infection				7
Septic abortion	0	4	4	
Pyelonephritis with uremia	0	1	1	
Postpartum	0	1	1	
Hepatitis	0	1	1	
Toxemia				17
With CVA	1	2	3	
Eclampsia	5	7	12	
Pre-eclampsia		1	1	
With pulmonary edema		1	1	
Anesthesia		1	1	
Embolism, pulmonary	1	4	5	
Cardiac	1	4	5	
Cerebral hemorrhage with HCV	0	1	1	
TOTAL	11	46	57	

#### Summary

Hemorrhage	21
Infection	7
Toxemia	17
Anesthesia	1
Pulmonary Embolism	5
Cardiac	5
Cerebral Hem. with HCV	1

It is interesting to note that only 11 white deaths occurred compared to 46 colored deaths. This discrepancy has been consistently noted during the past few years and reflects the economic pattern in our state.

There were 35,887 white live births and 27,448 colored live births with a total number of 63,375 live births for 1957.

Lawrence Hester, Chairman

#### INTERIM REPORT, COMMITTEE, SOUTH CAROLINA MEDICAL ASSOCIATION, FOR STUDY: POSITION OF THE MEDICAL PROFESSION IN SOUTH CAROLINA REGARDING SOCIAL SECURITY.

Report to Council, South Carolina Medical Association. November 16, 1958.

This committee met in Columbia on November 16, 1958, the following members being present: Dr. George Dean Johnson, Spartanburg; Dr. Thomas Parker, Greenville; Dr. Cathcart Smith, Conway; and Dr. Ben N. Miller, Columbia (Chairman). Dr. Louis S. Miles, Summerville, was unable to attend because of professional responsibilities.

After an extensive discussion by the members of the committee regarding their personal feelings, they then indicated the facts that they had ascertained by questioning the members of the medical profession in their area. After many facets of the problem were discussed, a motion by Dr. George Dean Johnson was made as follows: The Committee on the Study of Social Security for Doctors recommends that Social Security be disapproved at this time. The reasons are listed as follows: (1) Under the present system, payments for Social Security will be borne by future generations; and on this basis it is morally wrong. (2) Social Security is financially unsound. There is no contract. There is no relationship between the amount of money paid in what is to be received. (3) If Social Security is accepted by the physicians, the profession will be liable to socialized medicine in its most vicious form.

This motion made by Dr. Johnson was seconded by Dr. Parker, put and carried by unanimous vote.

It is the committee's feeling that both sides of the problem of Social Security should be presented to the doctors and that Council make the following recommendations: (1) That basic information be supplied to the members of the South Carolina Medical Association, (2) That a plan of polling by mail be carried out to get a sampling of membership opinion, (3) That a formal hearing before committee prior to the annual meeting of the Association be held with ample time for discussion by those for and against the system.

Respectfully submitted,  
Ben N. Miller, Chairman

#### MEDICAL STANDARDS COMMITTEE FOR DRIVER CERTIFICATION (ADVISORY TO THE SOUTH CAROLINA HIGHWAY DEPARTMENT)

The Medical Standards Committee recommends the following:

1. Renewal of driver's license be put on a periodic basis, and renewed only upon satisfactory evidence of physical and mental fitness as determined by an appropriate questionnaire.
2. The above are in addition to tests of driving skill and knowledge of driving regulations.
3. Applicants meeting requirements have licenses renewed promptly.
4. Substandard applicants be required to submit medical evidence of their fitness to safely operate a motor vehicle.



5. Falsification of statements will delay renewal or forfeit the privilege of renewal, depending on circumstances.
6. That a guide setting forth minimum mental and physical standards be prepared for examining physicians.
7. Raise minimum driver's age from 14 years to 16 years because of undesirable social and medical consequences.

Dr. Shepard Dunn                      Respectfully yours,  
 Dr. Tucker Weston                  Ben N. Miller, M. D.  
 Dr. William Morchouse              Chairman  
 Dr. O. B. Mayer,  
 Ex-officio

# REPORT OF THE EXECUTIVE COMMITTEE OF THE SOUTH CAROLINA STATE BOARD OF HEALTH TO THE SOUTH CAROLINA MEDICAL ASSOCIATION

Annual Meeting May 1959

Public health activities in South Carolina have been centered during 1958 in attacking realistically health problems which have arisen due to the age in which South Carolinians are now living. In the deliberations of the Executive Committee this year, serious consideration has been given in planning, policy-making, regulating, or initiating control measures for conditions such as radiation, water pollution, chronic diseases and long-term illnesses, care of the aged in nursing homes, accidental deaths and injuries, viral diseases, water and waste disposal for subdivisions, rapid expansion of the shellfish industry in the State, and mental retardation. In addition to these areas of health concern, the Executive Committee has performed its responsibility in maintaining good public health practice in communicable disease control, environmental sanitation, vital statistics, maternal and child health, and laboratory services.

At the May 1958 meeting of the Committee, the Chairman and Vice-chairman, Dr. W. R. Wallace and Dr. Frank C. Owens, respectively, were re-elected. At the same time Dr. Frank C. Owens and Dr. V. F. Platt were re-elected to serve as representatives of the Executive Committee on the Water Pollution Control Authority. Dr. J. Howard Stokes was officially welcomed as a member of the Committee at the June 1958 meeting. Dr. Stokes was elected by the South Carolina Medical Association at its annual meeting in May to fill the vacancy on the Committee created by the resignation of Dr. W. R. Mead.

The administrative staff of the central office of the State Board of Health sustained great losses in October 1958, in the untimely deaths of two very valuable division directors, Dr. Harry F. Wilson and Mr. John O. Meetze.

Except for four years spent in military service, Dr. Wilson had been with the State Board of Health since 1930, and at the time of his death was Director of the Division of Laboratories.

Mr. John O. Meetze had been with the State Board

of Health continuously since 1945, serving as Director of Finance and at the time of his death was Director of Business Management.

With minor organizational changes these positions have been filled by promotion of capable persons already employed in central administration.

During the year the laws, rules, and regulations relating to public health in South Carolina were reviewed and brought up-to-date for compilation in a printed manual for distribution to central office personnel, city and county health departments, and others who are concerned with public health laws. A great deal of time during the Executive Committee meetings throughout the year was devoted to approval of certain revisions of rules and regulations, in order to have the manual as up-to-date as possible. The manual was printed loose-leaf style, so that any new laws, rules, and regulations may be added from time to time, with the old ones deleted. This activity has contributed greatly to the more efficient and effective administration of health matters over which the State Board of Health has jurisdiction.

The Water Pollution Control Authority and the State Board of Health, in a cooperative effort, have successfully established, equipped, and staffed at the Area Trade School in West Columbia, a radiological laboratory designed to make determinations as to the quantity of radiation present within the environments, and in a measure to determine sources of any existing or likely occurring radioactive health hazard. This joint effort is quite important, since it is evident that radioactivity, through the various uses in this State, will continue to increase in such a measure as to cause primary concern from the standpoint of public health.

Many interesting things have been happening in South Carolina in recent months in the field of radiological health. In September 1958 the State Health Officer and the Director of the Division of Sanitary Engineering visited the Savannah River AEC for the purpose of discussing with the AEC authorities present laws, rules, and regulations concerning radiation hygiene. Following this, Governor Timmerman called a conference to discuss the coordination of State activities with those of the AEC in connection with the use of radioactive materials in South Carolina. Among those present were members of other State agencies and representatives of the AEC from Aiken and Washington. At the conclusion of this meeting, Governor Timmerman appointed the State Health Officer as coordinator of activities in South Carolina in the regulatory control of the use of radioactive materials licensed in this State by the AEC until appropriate regulatory legislation may be obtained in South Carolina. The commission of the State Health Officer in this capacity has been continued by Governor Hollings.

State health officers and staff members of Alabama, Georgia, Florida and North Carolina joined with South Carolina, on invitation of the Savannah River Atomic Energy Plant at Aiken, in spending a day in

November at the plant for lectures and discussions on the operation of the plant, and in observation of the operation of the plant.

Laws for the control of radiation hazards are primarily the responsibility of the State. It is felt that each individual state in the United States has a specific obligation to its public concerning the use of radioactive material and also the use of Gamma ray producing machines. State legislation or regulations should include protection not only of the workers in the immediate plant, but such other conditions as where waste disposal is a potential problem, and any measures that would guard against leakage or over-exposure to the worker or the general public. All of these factors were included in a bill passed by the Senate at the end of the session in 1958 and which died in a House Committee during 1958. This has been re-introduced at the present session. This Radiation Hygiene Act was endorsed in principle by the House of Delegates of the South Carolina Medical Association at its annual meeting in Myrtle Beach on May 4, 1958.

The Executive Committee approved amendments to the Uniform Narcotics Act, all of which increased penalties, and a new bill to Prohibit the Obtaining of a Drug by Fraud, Deceit and Other Methods and to Provide a Penalty for Violating the Provisions Hereof were passed by the South Carolina General Assembly in the spring of 1958. Emphasis has been placed on regulations in the field of narcotics, barbiturates, and other dangerous drugs, resulting in an increase of convictions, warnings, suspensions, and revoking of licenses. There has been some encouragement in this field, for even though there was increased activity, and usually the victims are one or both of the professions of pharmacy and medicine, both have shown signs of further cooperation and active support. In the Pharmaceutical Association, at the annual meeting, they increased their dues in order to employ an assistant for the State Board of Health Drug Inspector. The Medical Examining Board revoked and suspended a number of licenses to practice medicine in South Carolina for violations and irregularities in regard to narcotics. The breakdown below shows convictions in the State during 1958:

Convictions for violation of Narcotic Act	30
Convictions in State Courts	27
Convictions in Federal Court	3
Convictions for violation of Barbiturate Act	2
Convictions for violation of Dangerous Drugs Act	3
Convictions for Practicing Medicine without License	1
Professional Licenses Cancelled or Suspended	11
Physicians	6
Pharmacists	2
Nurses	3
Narcotic Tax Stamps Surrendered	11
Physicians	10
Dentists	1

All of the 1959 funds under Public laws 725 and 482 have been offered to eligible sponsors in accordance with priority lists set forth in the current 1958-59 State Plan. These funds must be matched by the sponsors and under contract by June 30, 1960. To date the Agency has approved eleven (11) applications for 1959 funds with total project costs estimated at \$756,366.28. In addition to the funds earmarked for these eleven new projects, the participation in the Anderson County Hospital was increased in the amount of \$1,152,935.02.

In addition to the 1958-59 fiscal funds, twenty-one current projects with estimated costs totaling \$17,747,969.32 are being handled from previous fiscal year allotments. These twenty-one projects will provide three completely new hospitals (Chesterfield County Hospital, McClellan Banks Hospital, and Kershaw County Hospital which also contains a chronic disease wing and an outpatient department), five ancillary facilities and/or bed additions to general hospitals (Georgetown County Memorial Hospital, Spartanburg General Hospital, Byerly Hospital, Anderson County Hospital), one completely new intensive treatment hospital and outpatient department (State Hospital), six new public health centers (Orangeburg County, Clarendon County, Florence County, Cherokee County, Charleston County, Sumter County and Richland County), one new mental health clinic (Spartanburg), two outpatient additions to general hospitals (Columbia Hospital and Greenville General Hospital), one chronic disease wing addition (Divine Saviour Hospital), and one completely new nurses' home and training school (Kershaw County). Some of the above projects will be closed in the near future.

Final audits on five projects during the present fiscal year with costs totaling \$2,156,641.85 have been performed which provide a chronic disease wing addition and outpatient department to a general hospital (Conway Hospital), a chronic disease wing addition to a general Hospital (Marlboro County Hospital), and additional ancillary facilities and bed additions to three general hospitals (Berkeley County Hospital, Aiken County Hospital, and Marion Sims Memorial Hospital).

Under the hospital and related medical facility licensure program, the State agency currently licenses on an annual basis approximately one hundred seventy institutions. In addition to the recurring inspection requirement of facilities already licensed, the Hospital Section continually is requested to make preliminary inspections of proposed institutions, as well as reviewing plans for new construction.

The collection and analysis of morbidity statistics is one of the most important activities of the State Board of Health, since it is by the information gained from these statistics that the health of the State is determined. The methods of collecting morbidity have changed with time and with changing problems. The discontinuance of collection of these statistics through



the franking privilege by the U. S. Public Health Service left the responsibility of collecting morbidity and vital statistics to the various State Boards of Health. The South Carolina morbidity card has been designed in an effort to make collection of these statistics more meaningful and the reporting more convenient to the practicing physician.

Morbidity from viral diseases has assumed a major proportion of illness affecting the people of South Carolina. The bacterial diseases are now less frequent in occurrence than the viral ones. Diphtheria cases that occur are for the most part in unimmunized children which emphasizes the need for continued efforts to more completely immunize the childhood population. Diphtheria occurred at a low incidence of only 41 cases in 1958, and entirely as sporadic cases. Typhoid fever occurred at an unprecedented low of only twelve cases during the year. Only seven cases of typhus fever occurred, and only one case of malaria—and it in military personnel contacted outside the United States.

Of the viral diseases, the upper respiratory infections and measles were the most frequent. There was wide-spread epidemic measles during the early months of the year. There were some cases of influenza reported, but no epidemics as occurred in the preceding year with the Asian Strain.

During 1958 approximately one hundred aseptic meningitis-like illnesses occurred in the town of Calhoun Falls and vicinity. A few similar cases have occurred in other areas of Abbeville County and sporadically in a few isolated areas in the State. The causative agent, Echo Virus #9, has been recovered from one of three wells supplying water in the community. This is not conclusive as the sole source of the origin of the outbreak, but is probably only one of many contributing factors. The interesting feature is that as far as can be determined it is the first time a virus has been recovered from a public water supply.

Poliomyelitis has occurred at a very low incidence of only thirty-two cases, twenty-two of which were paralytic and fourteen of which were under five years of age. Two of the paralytic cases had received three inoculations of vaccine. The polio vaccination program continued during the year with the administration of 213,310 doses. Approximately one-fourth of these were administered by private physicians. Since vaccine became available, 702,836 of the approximately one million population under twenty years of age have had one or more doses of vaccine. The age group 5-14 years has been well immunized by cooperation by school officials, health departments, and physicians. The age group under five years, which has always been the most susceptible age group in South Carolina, is not as well immunized as the elementary age school child because of apathy and neglect on the part of parents who have not carried these children for immunization. The white children of this age group are much better immunized than the Negro because the parents of white children are more ac-

customed to carrying their children to physicians for regular examinations. Pregnant women compose the vast majority of the age-group over 20 years receiving poliomyelitis vaccine inoculations.

The State Board of Health is giving considerable study to the increasing problem of long term illness in the population. With an increasing age population in South Carolina, there will be an increasing amount of chronic and long term illness and other problems of the aging. The State Board of Health is vitally interested in the medical profession exhibiting leadership in the medical care and prevention of these somewhat new and increasing problems. The public health agencies and private practitioners of medicine together can solve these problems in the same way that the problems of acute communicable diseases have been solved.

The rabies control program continues to effect reductions in the need for human treatments. In 1958 positive animal heads declined to a new low of only 119 in the State and human treatments to a new low of 1100. This is a reduction in human treatment from 3356 in 1950. Aside from the approximately \$4,000 annually in the cost of vaccine, this program is saving the State, the reduction in anxiety and inconvenience to adults and to parents whose children would have been taking the vaccine cannot be measured in monetary terms.

The insect control program continues to be one of the most popular of the State Board of Health, and very effective in the over-all public health protection of the people. In addition to many insect-borne diseases that are prevented through such a program, the protection of the people from insect nuisances is of value as a public health measure in providing more pleasant living and recreational environments. During the year 85,038 premises in 34 counties were residually sprayed for the control of mosquitoes and fleas. In addition, 135,099 acres and 79,792 acres in 41 counties were controlled respectively by fogs and dusts.

The State laboratory performed a total of 334,553 tests and examinations. In this figure are included 1,745 diagnostic procedures for viral and rickettsial diseases which were carried out by methods recently established in the diagnosis of these diseases, these methods having been employed in this laboratory in increasing numbers during the past two years. Whereas in 1957 this phase of the laboratory work was almost entirely devoted to the diagnosis of differential diagnosis of poliomyelitis and to the diagnosis of respiratory disease in connection with the epidemic of Asian type of influenza, in 1958 activities of this division of the laboratory have been somewhat extended in number and scope. Diseases for which tests have been performed by tissue culture procedures for virus isolation, serological tests, or both of these methods, have included poliomyelitis, Coxsackie and ECHO virus infections, mumps, lymphocytic choriomeningitis and equine encephalitis, and



Rickettsial infections. With reference to the last named, laboratory confirmation of the clinical diagnosis of Rocky Mountain Spotted Fever, Eastern type, was provided in several cases in widely scattered parts of the State. Few requests were received for tests for influenza and results obtained in those which were made showed only rare evidence of recent influenza A infection, and no evidence of an outbreak or epidemic of Asian type influenza such as had been observed clinically and confirmed by laboratory findings in the fall of the preceding year.

Further expansion of the virology division of the laboratory, within the limited existing facilities, is planned for the coming year. In connection with long established diagnostic procedures in a still important virus disease, namely rabies, further instruction was scheduled for a member of the laboratory technical staff at a refresher course at the Communicable Disease Center of the U. S. Public Health Service, Chamblee, Georgia. During 1958 animal heads examined totalled 734, with positive findings in 119, or 16.1% of those examined, representing a fall from 23.0% positive in 1957.

Developments of importance in other divisions of the laboratory included studies of the correlation of the New Kolmer-Reiter protein test with other serological tests for syphilis and with findings revealed by the T test, in collaboration with the Communicable Disease Center; preparation for special study and classification of staphylococci in outbreaks of resistant staphylococcal infections; and initiation of the use of serological tests for the diagnosis of leptospirosis. Also accomplished in 1958 have been the addition of a cryoscope to the equipment available here for testing milk samples; establishment of the technique for testing milk for antibiotic content in situations where need for this test is judged by a county health department to be indicated; and the acquisition and initial use of millipore filter equipment for testing water samples. A millipore filter school, conducted by the U. S. Public Health Service and the South Carolina State Board of Health, was attended by four members of the laboratory staff.

An additional 21,514 tests and examinations were performed by the four district laboratories at Anderson, Florence, Spartanburg, and Walterboro. There were also 25,876 tests and examinations carried out in four laboratories of county health departments at Charleston, Greenville, Laurens, and Sumter. All these laboratories provided services to health departments, individual physicians and clinics, and hospitals not having facilities for these services requested, to aid in the prevention, control, and diagnosis of diseases of public health significance.

Tuberculosis incidence and mortality rates have been decreasing during the past several years. However, due to better community organization and by putting more emphasis on x-raying apparently well persons over 45 years of age (this is the age group where the greatest reservoir of tuberculosis is found)

78 more cases of tuberculosis were uncovered by the two mobile x-ray units in 1958 than in 1957. Approximately a quarter of a million South Carolinians received chest x-rays during the year through x-ray facilities of the local health departments and the two mobile x-ray units operated by the Tuberculosis Control Section of the State Board of Health.

There is an extremely high interest among private physicians, dentists, hospitals, and health departments in the potential radiation dangers in the operation of x-ray equipment. Numerous requests have been received from these, individually and in groups, for the inspection of their x-ray units. One hundred fifty-seven x-ray units have been checked and corrections made when necessary.

The Heart Disease Control Section's emphasis has been in the educational field. During the past year this concentration has been for both the lay public and the professions. Seventy-five organized groups in thirty-three counties have been told of the new knowledge and new developments in heart disease, and the part the physicians in this State are playing in the field of heart research. A series of articles on heart disease was prepared and released to newspapers with an estimated circulation of 821,618. The *Heart Bulletin*, a periodical publishing the most current information on cardiovascular diseases, is sent regularly by the Section of Heart Disease Control to one thousand physicians in South Carolina.

Three hundred forty-seven nurses attended the two-day seminars in cardiovascular nursing recently conducted in four areas of the State. Twenty-four local private physicians participated in these seminars.

Last year 21,151 South Carolinians died as a result of cancer, and 2,515 new cases were reported to the State Board of Health. About 10,000 persons in the State have this disease in various stages. Today one in three cancer cases is saved by treatment. With earlier diagnosis two out of four could be cured.

During the calendar year 1957, 1,296 new cancer cases (521 males and 775 females, of which 765 were white and 531 Negro) received treatment in the State-Aid Cancer Clinics. An additional 2,958 old cancer clinic patients were examined periodically in order that any recurrence of the disease might receive prompt attention. These patients made 16,512 visits to the State-Aid Cancer Clinics. Since prompt treatment of the early case of cancer means cure in the majority of instances, there is always interest in determining the number of early cases treated in the clinics. Of the new cancer patients referred to the clinics, 591, or 45% had localized disease.

The physicians in the State-Aid Cancer Clinics are well trained, interested, and enthusiastic, spending many hours caring for indigent cancer cases. These physicians render their services without any financial compensation. Our primary limitation in linking the cancer problem in South Carolina is inadequate funds.

The State Board of Health works closely with the South Carolina Tuberculosis Association, South Caro-

lina Division of the American Cancer Society, and the South Carolina Heart Association, to prevent duplication and overlapping of services.

The venereal disease program has been based principally on finding the infected individual through interviewing infectious cases for their sex contacts and field investigation to bring the contacts to examination and/or treatment. This activity has been further pursued by a so-called cluster testing technique, which is based on the assumption that a venereal disease patient and his contacts are likely to lead to other infected persons, whether or not they have had sexual contact with them. Association in the same circles may result in similar experiences. This technique involves the eliciting the names of the patient's immediate acquaintances and friends with whom he has not had sexual relations. The contacts of the patients are also interviewed and asked for the names of the people with whom he associates in his work or socially.

Blood testing survey program have been conducted in areas known or suspected to have a high prevalence of syphilis. Approximately 25,000 tests were made during this phase of the program, and approximately 750 persons treated for syphilis for the first time.

All reports of positive blood specimens tested by the State Laboratory and mailed to the private physician have been accompanied by a V. D. Morbidity Report Card, by which the private physicians of the State have made most gratifying responses. Of the 305 primary and secondary cases of syphilis reported during the year 1953, or 63% were reported by private physicians. In another important early stage of syphilis, early latent, where the patient has had the disease less than four years, the private physicians of the State reported 438 of the total 718 cases, or 61%. The only disease which the private physician failed to report as much or more than the health departments clinics was gonorrhea. Of the total of 5,413 gonorrhea cases reported to the State, the private physicians sent in 689 cases, or 12.7%. Venereal disease clinics were maintained in all of the forty-six county health departments of the State. These clinics made 52,397 diagnostic observations to determine the presence or absence of venereal disease. Of this total 6,459 persons were found to be infected, or 12.3%. Not involved in the number infected were 1,095 persons who were treated prophylactically.

The county health departments are the basic service units in the administration of public health, providing their communities with all the direct services available through the specialized clinics operated by the State Board of Health, and other official and non-official agencies. While the county health departments are allowed ample scope for the initiative and creative activity of the health officer and his staff, in central administration the Division of Local Health Services has discharged its responsibility of assisting these departments in developing and carrying on a well balanced program of activities which included

all the objectives of the state-wide public health program and in addition, those objectives that were needed to meet specific health needs. Service was rendered in the allocation of State and federal funds to the individual counties in keeping with the provisions of Appropriation Acts, assisting each county in the preparation and administration of its annual budget, and in justifying and securing local appropriations.

The Division of Local Health Services has helped with recruitment, orientation, and training of personnel employed in the county health units. With the assistance of the State Supervising Nurse and the Chief Sanitarian, county public health nurses and sanitarians have been given guidance in their local program planning of nursing and sanitation services. A Sanitarian's Manual containing all the laws, rules, and regulations relating to sanitation and all the record forms used by sanitarians has been prepared in a looseleaf form and furnished each sanitarian. To this will be added revisions and policy letters.

Quarterly meetings of all health officers and administrative assistants have been held to discuss problems which the health officers themselves feel the need of discussing in groups where broad objectives and policies can be developed.

In-service training has been provided public health workers through workshops and conferences conducted by the various divisions of the central office and regularly scheduled district meetings. During June 1958 a three-weeks course carrying college credit was given in chronic diseases at the University of South Carolina, and approximately fourteen nurses took the course. In addition, a three-day conference on community problems in chronic alcoholism was conducted at the University. As a follow-up of the conference an in-service education program was conducted in four areas of the State enabling all public health nurses to attend. A number of county health nurses attended one or more of the one-week study courses offered by the School of Public Health, University of North Carolina, in cancer, tuberculosis, chronic disease and accident prevention.

One of the greatest needs is for sufficient funds to enable the State Board of Health to employ personnel with adequate training in public health (there is an acute shortage of trained public health workers) or to employ personnel with good basic education and then have the means of assisting them in securing public health training. No training funds have been available since 1951. At the present time eight counties are without health officers and are being served by administrative assistants who have been appointed to have administrative responsibilities for property, supplies, the signing of official communications, liaison with county delegations and with the public in matters concerned with public relations. The administrative assistants are under the guidance of the Director of Local Health Services. The remainder of the health departments are served by



twenty-three full time health officers and five part time health officers. There are nine bi-county units, one tri-county unit, and the remainder are single units. The tri-county unit is served by one full-time health officer and one part-time health officer. Each of the bi-county health units has a full-time health officer, and the remainder are served by a single full-time health officer or a part-time health officer, exclusive of the eight while at the present time do not have the service of a health officer. The county staffs consist of approximately 186 public health nurses, 95 sanitarians, and 114 full-time clerks.

In the maternal and child health program 694 prenatal clinic sessions have been held by private practicing physicians and 1,136 by health officers, rendering service to 4,839 new and 15,694 return patients; 696 child health clinic sessions by private physicians and 479 by health officers, rendering service to 8,094 new and 18,902 return patients. Special clinics were conducted in the spring of 1958 by many counties for children entering school in the fall of 1958.

A vision screening program for pre-school and school children was initiated in 1958 in eleven counties. This program was carried out in cooperation with the South Carolina Congress of Parents and Teachers, who furnished volunteers who were trained to do the screening, the South Carolina Medical Association (Advisory Committee), the State Department of Education, the National Society for the Prevention of Blindness who furnished an instructor for the volunteers. This program proved highly successful, with 9,034 children being seen and a total of 763 abnormalities being found. Follow-up for correction will be done by county health nurses.

A Health Education Guide for the teaching of health and safety in grades 1-12 for aiding teachers in health instruction has been developed by a State Health Education Guide Committee on which have served the director of the Maternal and Child Health Division and the Health Education Consultant assisted by other central administration staff members. Through the School Health Committee of the South Carolina Medical Association efforts are being made to develop a School Health Committee in every local medical society in the State, a function of which will be to participate in planning for the health of the school-age child on a community level. Assistance was given to this Committee on planning and carrying out a symposium on "Athletics and Athletic Injuries" for state high school coaches.

Close working relations have been maintained with the Infant and Child Health Committee of the State Medical Association in initiating a special study on neonatal deaths in twelve hospitals in the State. Special studies on infant and maternal mortality have been carried out also, with all maternal deaths being investigated. Consultative services in the care of premature infants have been furnished to physicians, institutions delivering and/or caring for premature babies, and to local health department staffs.

In 1958 there were 932 certified midwives in the State who delivered 16% of the 62,942 births, which is a reduction of 1% over the previous year. Two institutes for a period of two weeks each were held with seventy midwives attending for training. The changing maternal picture over the State is fewer midwife deliveries, more hospital deliveries, and shorter periods of hospitalization. Because of the increased number of hospital deliveries in some of the hospitals there is overcrowding in the nursery and undesirable practices in techniques, all of which increase the danger of infections, particularly the resistant staphylococcal infection.

Institutes in obstetrical nursing and nutrition education in the basic nursing curriculum were conducted in cooperation with the South Carolina League for Nursing.

In the accident prevention field a demonstration program on home accident prevention has been carried out by the Richland County Health Department staff; a second poison control center for the State was established in the Pediatric Department of the South Carolina Medical College Hospital in cooperation with the Departments of Pharmacology and Biochemistry; and the Maternal and Child Health Director has served as the South Carolina Chairman of the National Safety Council's 1958 Home Safety Inventory.

In the newly initiated demonstration program for the evaluation of pre-school children with developmental retardation, operated in cooperation with the Department of Pediatrics of the Medical College Hospital, 37 cases have been evaluated by various members of the clinic team and other consultants as indicated.

The Crippled Children's Division has continued its regular diagnostic and treatment services through its clinic, hospitalization, convalescent, and appliance programs. The case load of seizure patients has materially increased. It is now possible for seizure cases to be seen in the district clinics as well as the special Seizure Clinic at the Medical College in Charleston. The Crippled Children's Division is looking into the feasibility of providing drugs for these patients.

In addition to the twice yearly special Cleft Lip and Palate Clinics scheduled in the Columbia District area, Cleft Lip and Palate Clinics are now scheduled in the Greenville area.

The Crippled Children and Maternal and Child Health Divisions participated in the "Second South Carolina Conference on Handicapped Children" sponsored by the South Carolina Council of Handicapped Children (newly organized as a result of the first South Carolina Conference on Handicapped Children) and the Nemours Foundation, Wilmington, Delaware, in November 1958.

The rheumatic fever case load has increased considerably with a backlog of cases to be seen in the central area. There is a need for additional clinics in



this area and for the establishment of a clinic in the Pee Dee area.

The orthopedic camps were held as usual this year during the months of July and August, and 207 children (112 white and 95 Negro) attended the two camps.

The Convalescent Home in Florence which has a capacity of 44 beds (22 white and 22 Negro) has had a full house most of the year. One foster home (for Negro patients in the Charleston area) was kept at maximum capacity of patients during the year.

As of December 31, 1958, there were 5,418 patients on the Crippled Children's program. During the year 10,474 clinic visits were made. During the last fiscal year 530 patients spent a total of 10,791 days in the hospital, and 119 cases were closed as cured.

The Division of dental health has conducted dental health instruction in the schools through the "Little Jack" puppet show; advocated and promoted fluoridation of community water supplies where feasible, and applied 2% solution of sodium fluoride to elementary school children's teeth through the mobile demonstration unit.

Darlington, Kershaw (Springs Mill) and Lancaster (Springs Mill) began fluoridation in 1958. There are now fifteen towns and/or communities in South Carolina fluoridating and approximately 146,000 people in the State are drinking fluoridated water.

A true test of the benefits derived from fluoridation is shown in the "post fluoridation" dental survey performed in Orangeburg on December 3 and 4, 1958. Fluoridation was initiated in Orangeburg in September 1952. A "base line" survey of dental caries among 1,232 white school children, ages six through eleven years, performed in November of 1953 showed 31.8% had caries-free permanent teeth. Now, in 1958, the resident category showed this to have increased to 40.2%. There was a reduction in missing permanent teeth from 0.16% in 1953 to 0.12% in 1958, and a 48.6% reduction in caries among the six year old age group since the 1953 "base line" survey, and an over-all 25.1% reduction among the six to eleven age groups.

Fluoridation has its most profound effect upon those children born subsequent to its initiation. In a community such as Orangeburg, where fluoridation has been in effect for only six years, results are most definitive for the lowest age groups. A repeat survey will be done in another five years or ten years, or both, to determine the continued effectiveness of Orangeburg water fluoridation.

The Division of Sanitary Engineering has been responsible for the administration of certain health programs from the state level, and participation in other programs handled principally from the county level by furnishing consulting services and advice as requested by county personnel.

The Division has reviewed all plans and specifications for proposed construction of new treatment

works and additions to existing water and sewage treatment facilities; has maintained contact with all water and sewage personnel over the State, making supervisory inspections of operating practices and recommendations as to improvements thereof; monitored all bacteriological reports made by individual water plants and the State Laboratory; made routine inspections and certifications of all water systems which supply any interstate carriers; has approved plans for construction of all quasi-public and public artificial swimming pools; has processed forms necessary to assure the Federal Housing Administration and Veterans Administration and other home loan insuring agencies that the methods proposed for water supply and sewage disposal will meet the approval or disapproval of the Board of Health; has cooperated with Clemson College in its important undertaking of preparing and administering a correspondence course designed for and available to water and sewage plant operators in South Carolina; has supervised the sanitary conditions within abattoirs, poultry plants, salad kitchens, candy kitchens, bakeries, and other plants dealing with the production and distribution of food on a wholesale basis; and has controlled all aspects of sanitation in bedding manufacturing plants, bedding renovators, and places of storage which contain filling materials and finished products for sale.

The milk program has continued as a very important endeavor, as well as the sanitation of shellfish, crabmeat, frozen dairy foods, frozen desserts, bottling plants, and retail eating and drinking establishments. Progress in the shellfish program during 1958 has been significantly outstanding and is worthy of individual mention, because of the reduction in large measure of the "bootlegging" of oysters and the construction of sanitary facilities for processing oysters for sale from South Carolina.

Close cooperation has been maintained between engineering personnel in the Engineering Division and the Water Pollution Control Authority, which has resulted in a stronger position in the discharge of mutual responsibilities and services to the people of South Carolina.

The new program requiring all certificates of birth, fetal death (stillbirth) and death to be routed through the county health department has resulted in an improvement in the quality of data being provided; has speeded up the receipt of these vital records by the Bureau of Vital Statistics; has enabled the provision for counties of identical copies within two weeks after receipt of the original certificates; and has provided a means for citizens to obtain acceptable certified copies at the local level promptly. The Bureau currently registers and permanently houses approximately 132,500 vital records annually. There are about 4,000,000 certificates involved in the micro-filming program, plus many thousands of supplemental records which are pertinent to the original certificates. At the present time, the entire backlog of birth certificates (1915 through 1958) has been

microfilmed. The backlog of death certificates is in process of being microfilmed. The Bureau of Vital Statistics maintains an up-to-date register of physicians in the State.

The Public Health Education Section has provided educational assistance (Principles, methods, techniques, visual aids, and other materials of learning) to programs and services of the divisions and sections of the State Board of Health, to individual staff members, to local health units, and to community groups and organizations. Technical services, consultation, and how-to-do-it counsel have been supplied by the Section staff.

Through the use of punch cards and electronic I.B.M. tabulating machines the Tabulating Unit has contributed to the general efficient administration of public health work by providing quickly and accurately tabulations necessary to the operation of the State Board of Health.

As of December 31, 1958, there were 892 persons employed by the State Board of Health.

Funds for the operation of public health work in South Carolina have been derived from federal, State, and local sources, and have been administered through the Division of Business Management. The total funds from all sources expended through the State Board of Health during the past fiscal year ending June 30, 1958, amounted to \$7,780,152.10.

Respectfully submitted,  
W. R. Wallace, Chairman



#### NATIONAL HOSPITAL WEEK, MAY 10-16

The nation's hospitals, through the American Hospital Association, have invited their closest ally, the medical profession, to help them develop greater

understanding and appreciation of their services and contributions to the American people.

This year's program, centered in a seven-day observance of National Hospital Week, May 10-16, will emphasize the theme of "More Roads to Recovery." An explanation of these "roads"—better care, improved techniques and skills, greater numbers of personnel to apply the dramatic successes of medical science—will help offset a growing myth that hospital costs are greater than the services received.

Such distorted stories not only jeopardize public regard for the hospital but for the entire medical team, including the practicing physician. Consequently, it is to our mutual advantage to work together toward overcoming these detrimental impressions which are gaining some acceptance.

Kits and other working tools, prepared by the American Hospital Association, have been sent by the AMA to the executive secretaries of each state and metropolitan medical society, together with the names of the contacts of state hospital associations and metropolitan hospital councils, so that the medical profession may better coordinate its promotional efforts on behalf of the Week.

Through the use of public forums, tours of hospital facilities, talks to community groups, and radio, television, and newspaper facilities, the story of the unprecedented hospital services now available—resulting in shorter hospital stays, employment of all the medical advances, and healthier and longer lives—can be told convincingly.

"More Roads to Recovery" are the patient's reward for the close harmony and utilizations of the tools and skills of both the hospital personnel and the medical profession. These rewards can be made more meaningful by your participation in National Hospital Week.

Each physician in the community has a role and responsibility to win public support for the hospital in which he practices, and we urge you to offer your help to your hospital administrator and to your hospital association inasmuch as National Hospital Week, May 10-16, is an exceptional opportunity for creating greater appreciation of the entire medical team.



---

## WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

---

President: Mrs. George Orvin, Charleston, S. C.

Corresponding Secretary: Mrs. John Cuttino, Charleston, S. C.

---

### PRELIMINARY REPORT OF THE WOMAN'S AUXILIARY TO THE SOUTH CAROLINA MEDICAL ASSOCIATION

As President of the Woman's Auxiliary to the South Carolina Medical Association, I submit the following report. It will serve somewhat as a yardstick measuring the accomplishments of our organization. However, I do not feel as if any statistics can accurately convey to anyone all that has been done by the doctors' wives of this State.

At this time of year, our work and consequently our reports, are incomplete. However, enough information is on hand to give some idea of the Medical Auxiliary activities. Our membership will tally to some 800 members or above; so far, 380 subscriptions to Today's Health have been sold; reports show that already \$879.35 has been donated to A.M.E.F.—this figure is incomplete and will be well over one thousand dollars by convention time; reports on the National Bulletin (this has evidently never held much appeal for our members) show 106 subscriptions. There are 18 organized counties and approximately 20 members-at-large.

These are skeleton figures but so much more, of necessity, would have to be included in any report of the Woman's Auxiliary. A great majority of the auxiliaries concentrate their time and effort on Nurse Recruitment, Future Nurses Clubs and work with student nurses.

Each year, a Future Nurses' Club Rally is held at Winthrop College. Representatives from the auxiliaries attend this Rally with the high school students. Some hire buses and accompany the girls, while others attend in a convoy of cars driven by doctors' wives. These girls are given the opportunity to learn more about their chosen career and about many other allied medical fields. Enthusiasm runs high.

Some of our auxiliaries give nurses scholarships in addition to our State Loan Fund which is available to medical students and student nurses. Many auxiliaries help with redecorating or furnishing student nurses' quarters. A personal touch is added with teas or coffee hours for these girls.

Work is done by several county auxiliaries in connection with the Crippled Children's Society. Sponsorship of the Easter Lily Seal Sale or donations of needed equipment constitutes part of this work.

Our women, too, help hospitals over the State. Again, reports of furnishing equipment, bed gowns or linens, and beautification of hospital grounds are among the listed activities.

Programs are given at auxiliary meetings on Mental

Health, Public Health, Civil Defense Safety, and Legislation.

Last, but by no means least, auxiliary members have a splendid record of work done for local medical societies. At needed times, doctors' wives help with entertainment, coffee hours, flowers, and decorations. Some auxiliaries routinely furnish flowers for medical society meetings in their area.

As State President of the Woman's Auxiliary, I want to say that it is my sincere belief that our organization, operating both as county groups and as a State group, is doing many worthwhile things. If a county auxiliary should do no more than foster good relations and friendship among its members, then its work has been well done.

It is with sincere appreciation that I also express the deep gratitude of the Woman's Auxiliary for all the help, interest and cooperation which we receive each year from the South Carolina Medical Association.

Respectfully Submitted,  
Mrs. George H. Orvin, President

### PROGRAM FOR 1959 CONVENTION OF WOMAN'S AUXILIARY TO SOUTH CAROLINA MEDICAL ASSOCIATION TUESDAY, MAY 12, 1959

Registration—Wade Hampton Hotel—1:00 P. M. to 5:00 P. M.

Golf Privileges—Forest Lake Club—Greens fee —\$3.60 plus caddy fee

2:00 P. M. Student Loan Fund Committee—Parlor of President

Mrs. M. J. Boggs, Ch.—Wade Hampton Hotel

3:15 P. M. Auxiliary Committee Meeting with House of Delegates, S. C. Medical Association—Columbia Hotel

3:30 P. M. Finance Committee—Parlor of President—Mrs. L. Hayne Taylor, Jr., Chairman—Wade Hampton Hotel

### WEDNESDAY, MAY 13, 1959

9:00 A. M. to 5:00 P. M. Registration—Wade Hampton Hotel

\*9:00 A. M. S. C. Women's Golf Association Tournament—Fort Jackson, S. C.

\*9:00 A. M. Golf Game—Forest Lake Club—Greens fee \$3.60 plus caddy fee. Lunch optional for \$1.50 at Forest Lake club house

9:00 A. M. Auxiliary Committee Meeting with Council S. C. Medical Association

10:00 A. M. Executive Board Meeting — Wade Hampton Hotel, Mezzanine Floor

Mrs. George Orvin, President, Presiding



- °10:30 A. M. Bridge Luncheon — Forest Lake Club  
—\$2.00 incl. lunch
- 1:00 P. M. Executive Board Luncheon in honor of  
State Past Presidents—Wade Hampton Hotel
- \*1:00 P. M. Luncheon—Forest Lake Club. Open  
to any Auxiliary member \$1.50
- 3:00 P. M. Round Table Conference of County  
Presidents and Presidents-Elect—Wade  
Hampton Hotel—Mrs. John G. Ramsbottom,  
President-Elect, Presiding
- \*3:00 P. M. Tour of Doctors' Homes in Columbia  
—Motorcade will leave from Gervais Street  
side of Wade Hampton Hotel
- \*5:00 P. M. - 6:00 P. M. Tea sponsored by the  
Richland County Medical Auxiliary at the  
home of Mrs. A. T. Moore, 303 Saluda Ave.
- 9:00 P. M. Entertainment provided by the S. C.  
Medical Association

#### THURSDAY, MAY 14, 1959

- 9:00 A. M. to 1:00 P. M. Registration—Wade  
Hampton Hotel, Mezzanine Floor
- 9:30 A. M. House of Delegates—Wade Hampton  
Hotel  
Mrs. George Orvin, President, Presiding
- 9:00 A. M. S. C. Women's Golf Association  
Tournament—Fort Jackson, S. C.
- 9:00 A. M. Golf privileges—Forest Lake Club  
(\$3.60 plus caddy fee)
- 11:00 A. M. General Meeting — Wade Hampton  
Hotel  
Mrs. George Orvin, President, Presiding
- 1:00 P. M. Sherry Party—Wade Hampton Hotel  
Ballroom
- 1:30 P. M. Membership Luncheon—Ballroom,  
Wade Hampton Hotel—\$2.25 per person.  
Fashion Show presented during Luncheon
- \*3:00 P. M. Tour of Art Museum followed by a  
Coffee Hour  
Motorcade will leave Gervais Street side of  
Wade Hampton Hotel
- 8:00 P. M. Banquet—Columbia Hotel  
S. C. Medical Association

Note to Wives: We in Columbia hope we have  
planned what you would like to do. We will  
be glad to furnish transportation for the  
events marked above. Since Headquarters will  
be at the Wade Hampton Hotel, our trans-  
portation will leave from there.

Leone Castles (Mrs. C. G., Jr.)  
Convention Chairman

## DEATHS

### DR. WILLIAM McNEILL CARPENTER

Dr. William McNeill Carpenter, physician and  
surgeon and member of one of Greenville's old and

prominent families, died at his office, 200 E. North  
St. on February 8.

Dr. Carpenter was born in Greenville, August 22,  
1902, a son of the late Dr. Ernest Willoughby and  
Kitty McNeill Carpenter. He attended the local schools  
and was a graduate of Greenville High School, Fur-  
man University, the University of North Carolina and  
Johns Hopkins Medical College.

He served his internship at Johns Hopkins Univer-  
sity Hospital and his residency at Union Memorial  
Hospital in Baltimore, Md. His further training was at  
the Wilmer Eye Institute in Baltimore and at Bellevue  
Hospital in New York City.

In 1931, he began his practice as an eye, ear, nose  
and throat physician and surgeon with his father and  
had continued this work until the present.

He was a member of the Greenville County Medi-  
cal Society, the South Carolina Medical Association,  
the Southern Medical Association, the American Med-  
ical Association and the North and South Carolina  
Society of Ophthalmology and Otolaryngology.

### DR. G. L. DICKSON

Dr. George LeGrande Dickson, 90, Manning, for  
more than 55 years a practicing physician in Clarendon  
County, died February 20 at the Clarendon Mem-  
orial Hospital in Manning following a long period  
of ill health.

Dr. Dickson was born in Manning. He received his  
education in the Manning schools and the Medical  
College of South Carolina. On the completion of his  
education, he returned to Manning and began the  
profession in which he continued until he retired  
because of failing health.

For many years he owned and operated Dickson's  
Drug Store on West Boyce Street here, which had  
been operated by his father.

### DR. J. L. SAMPLE

Dr. James Lindsay Sample, 73, physician in Hamp-  
ton County for the past 44 years, died March 3 in  
Talmadge Memorial Hospital, Augusta, after a short  
illness.

Dr. Sample was born in Emanuel County, Ga.,  
September 26, 1886, the son of the late Dr. Caleb  
Lindsay Sample, physician there for many years, and  
the late Mrs. Sample. He was graduated from the  
University of Georgia and received his M. D. degree  
from the University of Georgia Medical College,  
Augusta. He completed two years of naval duty after  
finishing medical school.

Dr. Sample came to Hampton County in 1915 as  
company physician for one of this section's top lumber  
manufacturers, Lightsey Brothers, at Miley. From  
1918 to 1921, he left Miley to join the war effort,  
serving in World War I as a physician for a war ship  
building firm in Port Wentworth, Ga. Returning to  
Lightsey's after the war, Dr. Sample continued as

company doctor and build his own private practice in a wide area. He continued an active private practice at his Hampton office until his recent illness. The

trunk of his car was "a rolling drug store" from which he dispensed medicine.

# THE OFFICIAL SEAL OF THE SOUTH CAROLINA MEDICAL ASSOCIATION



PRESENT SEAL



SUGGESTED SEAL

Designed by  
Mrs. Hal Powe, Jr.  
Greenville

## WHICH DO YOU PREFER?



(More)



---

## Exhibitors Pages

---

### PET MILK COMPANY

Saint Louis (1), Missouri

We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of "Pet" Evaporated milk for infant feeding and "Pet" INSTANT Nonfat Dry Milk for special diets.

---

### CHARLES C. HASKELL & COMPANY

Richmond, Virginia

The Haskell representative will be happy to discuss new developments in connection with the familiar Belbarb, Hasamal, Hasacode products.

In addition will be featured Dipral, a new product for the treatment of rheumatic disease.

---

### DICTAPHONE CORPORATION

For busy doctors—Dietaphone Corporation presents the new Dictaphone Time-Master dictating machine. Fully-transistorized, the new Time-Master features the unbreakable plastic Dictabelt record.

Also featured will be the Dietaphone Telecord System for network dictation by phone in hospitals and the new battery-powered Dietet Portable Tape Recorder.

### GEIGY PHARMACEUTICALS cordially invites

Members and Guests of the Association to visit its technical display. Information on products valuable in the therapy of rheumatic, metabolic, dermatologic and cardio-vascular diseases will be presented by personnel in attendance.

---

### MEAD JOHNSON & COMPANY

The Mead Johnson exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives will be on duty to tell you about their products.

---

### THE S. E. MASSENGILL COMPANY

Bristol, Tennessee

Best wishes from Massengill to the South Carolina Medical Association for a most successful meeting. Should you desire, Massengill service representatives will be on hand at the Massengill booth to discuss with you any Massengill product in which you are interested. The S. E. Massengill Company and its service representatives would like to cooperate, in any way possible to make your meeting a complete success.



A. H. ROBINS COMPANY, INC.  
Richmond, Virginia

Physicians attending the meeting of the South Carolina Medical Association are extended a cordial invitation to visit the exhibit of the products of the A. H. Robins Company. Experienced medical representatives will be in attendance to welcome you and answer inquiries relative to any of Robins prescription specialties.

THE WM. S. MERRELL COMPANY  
Cincinnati 15, Ohio

TACE, a "treatment of choice" for suppression of lactation will be featured.

You are invited to discuss this and other Merrell research products with our representatives.

PARKE, DAVIS & COMPANY

Medical Service members of our staff will be in attendance at our booth to discuss important Parke-Davis specialties which will be on display.

C. B. FLEET CO., INC.

Fleet will feature CLYSMATHANE, its most recent contribution in the field of medication by rectum—an advanced method of xanthine therapy. CLYSMATHANE is a stable solution of theophylline monoethanolamine; easily retained; rapid and uniform absorption, prompt and predictable blood levels; with no rectal irritation after prolonged use.

CIBA PHARMACEUTICAL PRODUCTS, INC.

Esidrix is hydrochlorothiazide, an improved analog of chlorothiazide. Milligram-for-milligram, it is the most effective oral diuretic-antihypertensive known. Therapeutically, Esidrix is 10 to 15 times more potent than chlorothiazide. Weight losses up to 56 pounds have been in patients unresponsive to other oral and/or parenteral diuretics. Side effects are usually mild, infrequent and readily controlled.

WACHTEL'S PHYSICIAN SUPPLY CO.

Some of the new items that Wachtel's Physician Supply Company of Savannah, Georgia will display at the forthcoming Annual Meeting in Columbia will be:

The New Burdick EK-3 Dual-Speed Electrocardiograph. It will show the 25MM per second speed and the 50 MM per second speed.

The New Burdick MS-300 Stimulator connected to the UT-400 Ultrasonic unit to produce, simultaneously, a combination of ultrasound and electrical stimulation through the ultrasound applicator.

And many other New and Interesting Items.

BORDEN'S PRESCRIPTION PRODUCTS  
DIVISION

The Borden Company, Pharmaceutical Division, representatives will be on hand to thoroughly

familiarize the doctors with; BREMIL, the modern infant formula.

MULL-SOY—the contemporary hypoallergenic formula food for infants, children and adults allergic to animal protein.

MARCELLE Hypoallergenic Cosmetics and pharmaceuticals indicated in dermatological conditions.

WINCHESTER SURGICAL SUPPLY COMPANY

We invite you to visit our exhibit while attending the South Carolina Medical Meeting. Emory Floyd, Tom Coble and R. M. Conder will be there to greet you.

WM. P. POYTHRESS & CO., INC.

A cordial welcome awaits you at the Poythress booth, No. 29. Solfeton and its companion products, Antrocol and Solfoserpine, will be featured. Also featured will be Mudrane, outstanding Poythress antiasthmatic drug; Trocinate, Poythress distinctive antispasmodic; Panalgesic, leading ethical local analgesic and counterirritant; and other well-known Poythress specialty products. Literature will be available, and your request for trial supplies of any of these drugs is invited.

VANPELT & BROWN, INCORPORATED  
Richmond, Virginia

VanPelt and Brown extend a cordial invitation to visit their exhibit where representatives will be happy to answer questions and supply clinical samples of their products.

ELI LILLY AND COMPANY

You are cordially invited to visit the Lilly exhibit located in space No. 25. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

THE STUART COMPANY

The Stuart representatives in charge of our exhibit extend a cordial invitation to the doctors to stop at our booth and discuss the newer products we are currently detailing to the medical profession.

WESTWOOD PHARMACEUTICALS

Westwood invites physicians to stop by their booth to discuss their unique dermatological products:

Fostex Cream, Fostex Cake, Sebulex, Lowila Cake, Lowila Emollient.

These products are particularly suitable for personal use by physicians and their families, who may be plagued with dandruff, acne, dry itchy skin and sensitivities to soap. Register, so that we may send prescription units to your home.

MERCK SHARP & DOHME

A new and very promising adrenocortical steroid is featured at the Merck Sharp & Dohme booth. 'DE-

CADRON' dexamethasone possesses all the basic actions and effects of other glucorticoids but in different degree. Its anti-inflammatory activity is more potent on a weight basis than any other known glucocorticoid. Electrolyte imbalance is not ordinarily a therapeutic problem. Neither abnormal salt and water retention nor potassium excretion are discernible in most patients receiving therapeutic dosages. In other respects also, 'DECADRON' is generally well tolerated.

'HydroDIURIL', a new, orally effective, non-mercurial diuretic-antihypertensive agent is also of interest. This compound is the most potent diuretic agent presently available, equaling or exceeding even the most potent parenteral organomercurials in diuretic activity. Like 'DIURIL', the principal action of 'HydroDIURIL' is a marked enhancement of the excretion of sodium and chloride.

Technically trained personnel will be present to discuss these and other subjects of clinical interest.

#### ABBOTT LABORATORIES

The exhibit will feature the Abbott Laboratories antibiotic triad— three products which together provide control of all coccal infections: Erythrocin Stearate, Compocillin-VK and Spontin. Also shown will be Abbott's unique new "metered release dose form" products, Tral Gradumets and Desoxyn Gradumets, plus a selection of other Abbott specialties.

#### G. D. SEARLE & CO.

Chicago, Illinois

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be Dartal, the new tranquilizing agent which controls activities associated with anxiety states and other neuroses; Enovid, the new synthetic steroid for treatment of various menstrual disorders; Zanchol, a new biliary abstergent; Nilevar, the new anabolic agent, and Rolicton, a new safe, non-mercurial oral diuretic.

Also featured, will be Vallestil, the new synthetic estrogen with extremely low incidence of side reactions; Pro-Banthine and Pro-Banthine with Dartal, the standards in anti-cholinergic therapy; and Dramamine and Dramamine-D, for the prevention and treatment of motion sickness and other nauseas.

#### EATON LABORATORIES

Norwich, New York

New Furacin (brand of nitrofurazone) Cream—postpartum—prevents or controls infection, averts delayed healing of cervix and episiotomy wound; after cervical irradiation—minimizes sloughing, discharge and malodor; speeds healing while preventing adhesions; after cervicovaginal surgery, cauterization and conization — eliminates infection, reduces discharge and irritation, hastens healing. Furacin Cream

may be used as a multipurpose topical antibacterial when a fine cream base is preferred.

#### GEORGE A. BREON & COMPANY

At the Breon booth, professional representatives will present our leading prescription specialties, Demerol APAP and Compound Tablets, Broxolin Vaginal Cream, Doxegest, Blockain and Bronkephrine; The Disparene products for care of the infant and aged incontinent; and a new product of Lanteen research, Lanesta Vaginal Gel . . . for more reliable family planning.

#### WARNER-CHILCOTT LABORATORIES

*Choledyl*—a new drug, has been highly effective in the treatment of bronchial asthma, bronchospasm and congestive heart failure. *Choledyl* assures high oral theophylline blood levels, with minimal side reactions; it rarely produces fastness. *Proloid*—the total thyroid complex, doubly assayed, biologically as well as chemically. It provides an economical and complete substitution therapy for the long-range treatment of hypothyroidism. *Tedral*—to control the symptoms of bronchial asthma, provides three specific actions against major symptoms.

#### COLUMBIA BRACE SHOP

Corrected Shoes, Orthopedic Braces and Appliances.

#### ENDO LABORATORIES, INC.

You are cordially invited to visit the Endo exhibit. Products featured will be—Coumodin Sodium—a potent hypoprothrombinemia-inducing agent — the more ideal anticoagulant.

Percodan and Percodan-Denu tablets—For prompt and prolonged pain relief.

Perin Syrup and Wafers—Anthelmintic for pinworm and roundworms infestation.

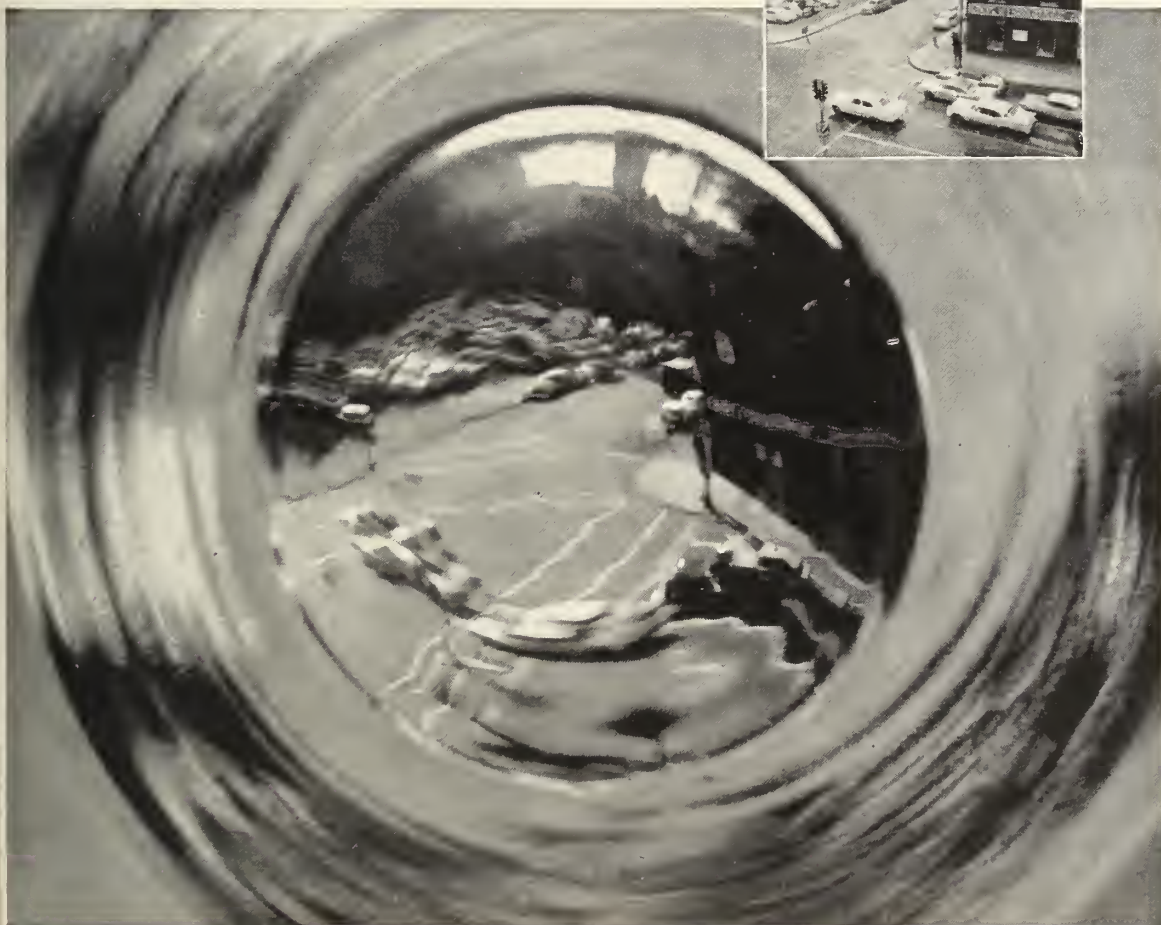
#### SEALY OF THE CAROLINAS

Sealy of the Carolinas, Incorporated, with manufacturing and distribution facilities throughout North and South Carolina will exhibit the nationally famous Sealy Posturepedic innerspring and foam rubber mattresses and foundations.

Posturepedic innerspring mattresses were developed in 1948 in line with recommendations by members of the medical profession. Retail pricing on Posturepedic innerspring is \$79.50 each per mattress or foundation. Since 1948 members of the medical profession have been permitted to purchase this mattress or foundation at a special medical discount pricing of \$60.00 per piece.

Posturepedic foam rubber, over its matching posture-lok extra height foundation, is unique in its field, having been judged by a national testing company to

**CONTROL  
VERTIGO, DIZZINESS...  
AND  
ELEVATE THE  
MOOD**



with **Dramamine-D<sup>®</sup>**

brand of dimenhydrinate with dextro-amphetamine sulfate

"Disturbances of balance resulting from vestibular disorders have long been known to lead to severe anxiety."\*

Vertigo—whether of organic or functional origin—tends to leave depression in its wake. Dramamine-D is a therapeutic combination designed for treatment of the entire vertigo-reaction syndrome. Each tablet contains dimenhydrinate (50 mg.) to control dizziness, and dextro-amphetamine sulfate (5 mg.) to elevate the mood.

\*Pratt, R. T. C., and McKenzie, W.: Anxiety States Following Vestibular Disorders, *Lancet* 2:347 (Aug. 16) 1958.

**Dramamine<sup>®</sup>** available as tablets, ampuls, liquid, suppositories

Research in the Service of Medicine

**SEARLE**



be 50% firmer and with 75% less 'shimmy' or side sway than any other nationally advertised brand. The retail pricing on Posturepedic foam rubber sets is \$179.50. The medical discount pricing is \$140.00 per set.

Both Posturepedic innerspring and foam rubber, over their matching foundations, carry twenty-year registered guarantees.

---

DOHO CHEMICAL CORPORATION  
DOHO CHEMICAL CORPORATION is pleased to exhibit:

Auralgan—Otitis Media and removal of Cerumen.

Otosmosan—Fungicidal and Bactericidal in the suppurative and aural dermatomycotic ears.

Rhinalgan—Nasal decongestant free from systemic or circulatory effect.

Larylzan—Throat spray and gargle for infectious and non-infectious sore throat involvements.

Turgasept—ionic deodorizer aerosol spray, neutralizes odor immediately without floral masking or substituting a new odor. It is highly bactericidal and fungicidal and was primarily formulated for use in hospitals, nursing homes and animal clinics; however, can be used in any type malodor condition.

Mallon Chemical Corporation, Division of DOHO:

Rectalgan—For relief of pain and discomfort in hemorrhoids, pruritus and perineal suturing.

Dermoplast—An Aerosol Spray for surface pain, burns and abrasions; Obs. & Gyn. use.

---

#### SANDOZ PHARMACEUTICALS

Sandoz Pharmaceuticals cordially invites you to visit our display at booth #31.

MELLARIL—the first potent tranquilizer with a selective action (i.e.—no action on vomiting centers.) This unique action gives specific psychic relaxation with safety at all dosage levels.

BELLERGA—Space Tabs assures around the clock control of functional complaints (example—menopause symptoms) in the periphery where they originate.

FIORINAL—a new approach to therapy of tension headache and other head pain due to sinusitis and myalgia.



## CHRONIC BRONCHITIS or INFECTIOUS DERMATITIS?



ACCELERATE THE  
RECOVERY  
PROCESS WITH

# VARIDASE BUCCAL

STREPTOKINASE-STREPTODORHASE LEDERLE

\*Reg. U.S. Pat. Off.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY,  
Pearl River, New York

TABLETS

# The Journal

of the

## South Carolina Medical Association

---

VOLUME LV

May, 1959

NUMBER 5

---

### ADDRESS OF DR. R. L. CRAWFORD

PRESIDENT OF THE SOUTH CAROLINA MEDICAL ASSOCIATION

Columbia, S. C. — May 14, 1959

Mr. President and Members of the House of Delegates:

At this Convention we are completing the one hundred and eleventh year as the parent association of organized medicine in South Carolina. It is my purpose today to give you a short resumé of my activities as your president during the past year. I will try to acquaint you with some of the problems that confront us today.

During the year I attended a number of county and district medical meetings, the executive council of the Woman's Auxiliary, the opening exercises of the Medical College, and county officers' meeting. It was my pleasure to address several of these meetings. Legislative-wise we have been able to travel a rather tranquil course. Very few adverse issues have arisen during the year. Most of them have required a minimum of effort on the part of the president and council. In the main they were disposed of by our committee on Legislation and Public Policy under the able leadership of its chairman, Dr. Frank C. Owens.

A trial program for improving our public relations was recently authorized by council. Its purpose is to disseminate correct and proper information about current medical events that would be interesting and informative to the general public through the lay news media in the state. Dr. Joseph I. Waring, Editor of the Journal, was named by council to direct this program. The trial balloon was to extend from March, 1959, through this meeting. I hope the Association will de-

cide to authorize its continuation through the coming year. It is my opinion that considerable benefit can come to the Association through such a program.

During this past February I attended the National Blue Shield Professional Relations Conference in Chicago. Presidents of all the state medical associations were invited to attend. I think all attended or had representatives there. The conference was most interesting. Many excellent addresses and several panel and group discussions were on the program of events. All were extremely interesting, especially in view of the fact that a program is being rapidly developed to enter into the field of coverage for our senior citizens. During the year I attended our Blue Shield Board of Directors meetings in Columbia and, after listening to the discussions at the Professional Relations Conference, I, more than ever, realize that the organization in this State is second to none in the country. This is our plan and should be given one hundred percent support, especially during the coming years that will be critical ones for organized medicine.

Many organizations, both government and private, are interested in the problems of the senior citizen. What can be done to make his life one of comfort and security is the urgent question to be answered. There are many facets to this problem and every element of daily living ought to be examined in the light of all factors, including those peculiar to the elderly individual and, also, those common to

all persons.

Medical and health problems of aging and the aged embrace special social, economic, physiological, psychological, and occupational considerations. Approaches to the solution, prevention, or reduction of these problems affect both young and old. They call for community and individual action.

Preparation for old age must begin in youth and continue throughout life. This need for preparation has become increasingly important. It should be recognized and acted upon by all people. Due to the present and the anticipated size of the aged population it is imperative that medical societies at all levels foster efforts aimed at:

- (1) Stimulation of a realistic attitude toward aging by all people.
- (2) Extension of effective methods of financing health care of the aged.
- (3) Expansion of skilled personnel training programs and improvement of medical and related facilities for older people.
- (4) Promotion of health maintenance programs and wider use of restorative and rehabilitative services.
- (5) Amplification of medical and socioeconomic research in problems of aging.
- (6) Leadership and cooperation in community programs for senior citizens.

Of first importance is a broad understanding by all people of the ways in which the aging processes and the special requirements of older people affect the lives of every person. To accomplish this calls for a broad and energetic educational program using all the resources of the individual doctor, the county society, and the state and national Medical Associations.

Older people cannot be isolated and relegated to a "do-nothing" status. The individual and his family should be advised as to how to meet the needs relative to the aging process. They should be made to realize their primary responsibility. Labor and industry should re-evaluate their ideas about arbitrary retirement based on chronological age and avail themselves of the full capabilities of the senior citizen. From the moment of conception the process of aging begins. Too many people fail

to realize this and avoid thinking about the day when they must retire. Consequently no preparation is made during their younger, productive years for this retirement period. It comes to them as a form of psychological death. To avoid this one must plan for retirement during his younger life. In doing this many of the health problems of aging can be avoided or mitigated and a major part of the emotional and social hazards by-passed. He must prepare himself for the large drop in income and acquire an adequate insurance plan to prepay all or part of his health expenses. Everyone should have regular physical examinations on a yearly basis throughout life. In this way disease can be detected early and a cure effected in most instances.

During the last fifty years medicine has contributed, substantially, to the increase in our life span and to the rehabilitation of the sick and injured. All physicians should be conscious of an obligation to assist their patients in achieving the best in life for themselves by using all of the diagnostic and therapeutic procedures necessary to aid in improving the patient's physical and mental capacities. He should guide and encourage the patient in the use of non-medical resources that can assist him in becoming a self-sustaining individual. The patient and his family should be made conscious of the importance of regular examinations and their responsibility of keeping accurate records of physical examinations, past illnesses and preventive medical procedures they have had. By this means many diseases can be detected before they have progressed too far to be cured.

Voluntary health insurance programs should be made available to all persons, including those over 65 years, and the cost of this insurance should be in a range compatible with the insured's ability to pay, especially in the older age group. Indigent medical care programs should be supported by adequate funds on the local level. The local appropriating bodies should be advised and prodded to recognize their responsibility in the care of older people who are unable to finance their own health care. All physicians recognize the fact that their art and science belong to all the



sick—rich and poor alike. Therefore, many millions of dollars of free medical care are given to indigent patients each year by their doctors.

Current experiments by health insurance companies, Blue Shield and Blue Cross indicate that, despite difficulties, solutions to special insurance problems of the aged can be found. Doctors, everywhere, should encourage and foster new efforts in this field.

Because of the anticipated growth in the aged population the need for qualified personnel trained to care for older people is obvious. This growth in the aged population is creating shortages of skilled personnel. Therefore, special efforts should be made to enlarge the number of persons qualified to work with older people at all levels of medical training.

Medical schools, hospitals, and nurse training programs should include this subject in their curricula and condition the thinking of physicians and allied professional personnel for new needs in care of the aging. This must be done by medicine on a continuing basis.

Facilities for the care of our senior citizens, afflicted with long-term illness, should be developed in every county through aid from the Hill-Burton Construction Program and local contributions, or by extension of F.H.A. type loans to non-profit and proprietary health facilities serving the aged.

Research is important in all phases of medi-

cine and should be encouraged in the field of the aging. By this means a realistic basis for evaluating the needs of elderly people will be provided and successful resolutions of their problems will be attained.

The encouragement of local programs for older persons should be a major activity of medicine, especially those that emphasize self-help and independence by the senior citizen. Kindness, companionship, and a little attention will do much to keep the elderly person well and happy.

This organization's committee on aging has been very active and has worked hard to complete a constructive program for dealing with the situation in so far as it affects medicine in our State. Many other organizations are also vitally interested in the problem. A State committee has been appointed composed of representatives from each interested group so that an over-all program of action can be developed to more effectively meet the needs of all phases of the problem.

I wish to express my appreciation of the many kindnesses of many people, during the year just passed. Especially would I like to thank the officers, committee chairmen, the Council, and the Woman's Auxiliary for their unfailing support. Without the help of others little could have been accomplished. Because of the loyalty and cooperation of members of the Association my term as president has been an enjoyable and rewarding one.

# SURGICAL THERAPY OF CANCER OF THE COLON

BERNARD E. FERRARA, M. D.  
Charleston, S. C.

Of all the devastating malignant growths of the gastrointestinal tract, colon cancer offers the best prognosis. The average five year survival rate in unselected series of cancer of the colon and rectum approximates 50%.<sup>1,5,6,10,12,14</sup> Actually cure rates of 85% might be expected in cases in which mesenteric lymph nodes are uninvolved and in which a satisfactory cancer extirpative operation has been performed.

By comparison, survival statistics of cancer of the esophagus and stomach should impress. Cure rates of 20% or better for stomach cancer are unusual. Figures of 15% or less are common. Almost no one survives carcinoma of the esophagus for five years after the diagnosis has been made. There is only one recorded survivor of esophageal cancer beyond five years in the large experience of the Medical College Cancer Clinic.

Several factors favor operative cure of colon cancer. Metastases to nodes can be removed easily with the mesentery. Long lengths of colon can be sacrificed without physiologic harm to the patient. Distant blood-borne metastases are not common. Vascular metastases are usually limited to the portal circulation and therefore to the liver. In general, colon cancers grow slowly. Long survival with extensive intra-abdominal metastases is not unusual.

When the diagnosis of cancer of the colon has been made, adequate preoperative preparation must be planned. Evidence of metastases does not negate exploratory operation, since local resection of the tumor while not curative will prevent obstruction and increase survival time.

## *Preoperative Preparation of the Colon*

Improvement in operative morbidity and mortality in operations for colon cancer has resulted in part from preoperative reduction of the bacterial flora of the large bowel. Peri-

tonitis complicating colon operations is now distinctly uncommon. The broad spectrum antibiotics are not suitable agents for sterilizing the large bowel preoperatively. The great disadvantage is the outgrowth of resistant organisms which often does or may eventuate. The poorly absorbed sulfas, sulfasuxidine and sulfathalidine, are partially suitable. In addition, a bacteriocidal antibiotic is desirable; and neomycin, because it is poorly absorbed, and because of its wide spectrum, has been satisfactory for this purpose.

The preoperative regimen includes sulfasuxidine in divided daily doses for five days. Neomycin is added 24 hours preoperatively. Whereas, we have had unfailing success with the combination of sulfasuxidine and neomycin, recent evidence indicates that kanamycin is more effective. A major advantage of kanamycin is that toxicity after intraperitoneal administration has not been reported. Respiratory arrest following intraperitoneal dosage of neomycin has occurred in the author's experience.<sup>3</sup> Of course, sulfasuxidine, neomycin, and kanamycin can be administered rectally and through colostomy stomata.

Whereas the importance of altering the bowel bacterial flora has been stressed, the mechanical cleansing of the bowel is important. This is accomplished by enemas and saline laxatives. A liquid diet is given several days before operation. Discrimination in evaluating the presence, or the degree, of obstruction in the individual case will recommend or interdict both enemas and laxatives.

## *The Treatment of Obstruction*

Obstruction, if present, must be relieved. This is always accomplished best by a colostomy proximal to the obstructing lesion. For lesions at the hepatic flexure, the colostomy can be made in the ascending colon, or exteriorizing cecostomy can be performed. For obstructing lesions in the transverse colon, the

colostomy should be made in the ascending colon. This also applies to lesions at the splenic flexure. For lesions in the descending or sigmoid colon, the colostomy can be conveniently made in the transverse colon. In all instances, the colostomy site is planned and made so that the colostomy is later resected with the lesion. This has always given satisfactory results and averts a later operation for closure of the colostomy. This latter operation usually entails resection of the colostomy because of edema of the bowel, and is seldom a simple procedure that it would seem to be.

A barium enema should be performed to localize the obstructing lesion and to plan the colostomy site. This should not be neglected in favor of the automatic transverse colostomy. Seldom is the patient too ill to withstand the rigors of diagnostic barium enema. Nor is the usual patient too ill to undergo sigmoidoscopy, which implies no more risk in the obstructed patient, than in a non-obstructed individual.

The exteriorizing cecostomy in lieu of colostomy is occasionally performed, particularly in carcinomas of the ascending colon. If the ileo-cecal valve is competent and obstruction of the right colon is present, the lower right colon and cecum may become precariously distended. The exteriorizing cecostomy in this circumstance is more desirable than bypassing the lesion with ileo-transverse colostomy which is an operation of greater magnitude.

Without reservation tube cecostomy or tube colostomy is never performed. Neither operation has merit, and each is ineffectual.<sup>7</sup> Often-times, the good results attributed to such operations are due to the concomitant use of a naso-gastric or enteric tube which is accomplishing bowel deflation, or in circumstances where obstruction, if actually present, is mild. It should be emphasized that while gastro-intestinal tube decompression may afford relief in large bowel obstruction which is not advanced and of short duration, this is a dangerous practice to pursue if the ileo-cecal valve is competent.

This is not meant to disparage the importance of tube decompression. Gastric or long tube decompression always is used initially in the obstructed patient, to relieve

the small bowel distention that is concomitantly present, and to prevent continued overflow of small intestinal content into an already distended large bowel. During this period the patient is prepared for a necessary decompressive operation. His general status can be evaluated, dehydration and electrolyte imbalances corrected, anemia treated, and pain relieved.

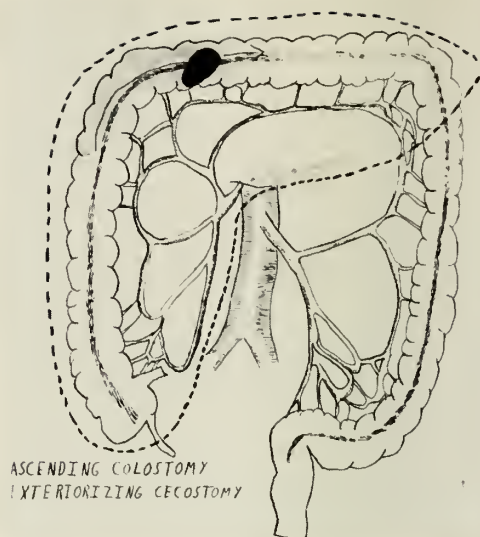
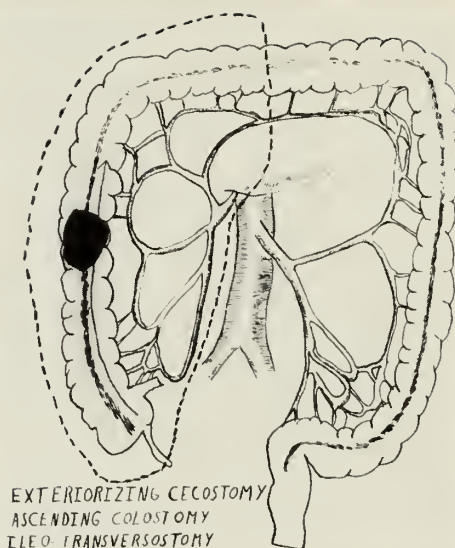
#### *Technical Considerations of Definitive Surgery*

The technical performance of the operation for cancer of the colon assumes great importance. Primarily an adequate length of colon should be removed. Where curative operation is possible, small resections are decried. The length of colon to be removed is dictated in part by the lymph drainage of the bowel segment involved. The mesentery with contained nodes must be removed with the specimen. A margin in length of colon of at least 15 cm. and preferably 20 cm. from the edge of the cancer should be realized. In actual practice, this is seldom a problem except in low sigmoid lesions where the resection must be carried into the rectum. The small resection with a V of mesentery is not a curative operation, because lymphatic channels and nodes, both of which may harbor metastatic cancer are left. Nothing short of complete extirpation of the appropriate mesentery with a long segment of colon is an adequate operation. The accompanying illustrations demonstrate recommended resections for lesions at various levels.

The demonstration of loose cancer cells in the lumen of the colon has been recorded. These cells have been shed from the lesion and are increased in number by manipulation of the tumor. Some of these cells may implant into a fresh surgical wound, and this would explain some recurrences in the anastomotic line. At operation, careful handling of the tumor should be practiced. Squeezing the tumor and manipulating the bowel while resolving indecision at which level to resect are deleterious practices. Tapes should be tied beyond the ends of the tumor to minimize the number of free cells in the bowel lumen.<sup>2</sup>

Cancer cells have been demonstrated in the mesenteric veins draining the bowel tumor and





Figures 1-5

Dotted lines enclose the area of the colon and mesentery to be removed, when cancer occurs in shaded portion of the colon.

Lymph nodes (not illustrated) are disposed along the vessels in the mesentery. Lymphatic channels in the right colon mesentery and the transverse mesocolon communicate. Those in the left colic mesentery communicate to the left transverse mesocolon. Lymphatic channels from the sigmoid and rectum drain to nodes in the mesentery of all branches of the inferior mesenteric artery.

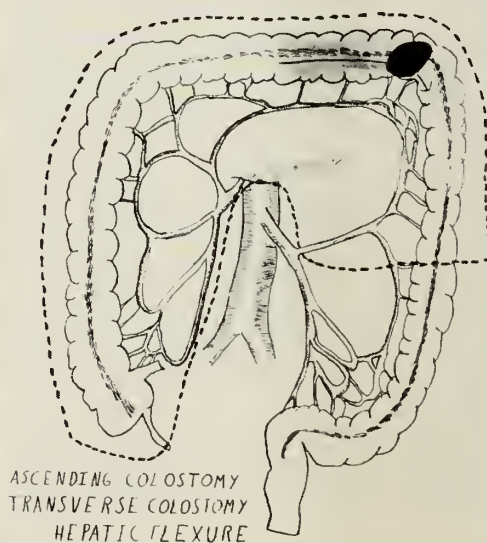
The appropriate defunctionalizing procedure in order of preference, when obstruction is present is labeled.

in the peripheral blood stream.<sup>4,8,9,11</sup> The number in either location may rise precipitately with manipulation of the tumor. Therefore, the blood supply of the involved segment should be ligated early in the operation. This must be done at the most proximal site of anticipated division of the vessels in the mesentery.<sup>2</sup> This is a vitally important maneuver, since death following curative resection for colon cancer is most often the result of hepatic and other visceral metastases via the mesenteric veins.<sup>4</sup>

#### Role of Chemotherapy

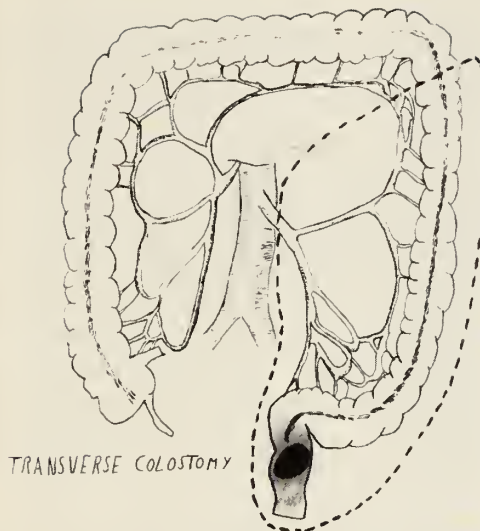
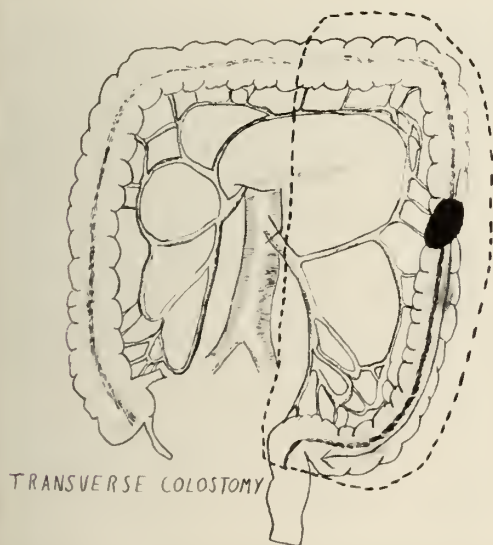
Considerable interest in chemotherapy has been engendered by the identification of cancer cells in veins draining tumor areas and in the general circulation. The exfoliative cytology of colon cancers invites study because of simplicity. The mesenteric veins are long and accessible for acquisition of blood samples. Effect of tumor manipulation and other fac-

tors on showering of cells into the vascular system can be studied. Likewise, the effect of local or general chemotherapy on the shower of cells can be evaluated. Since vascular metastases are seldom outside of the portal circulation, a relatively limited area of potential spread can be studied. Since the extent of the operation can not be anatomically extended, and since case finding probably will not be hastened significantly, it is reasonable to assume that the next potential avenue of improvement in cure rates lies in destruction of exfoliated cells in vascular channels.



The presence of cancer cells in the mesenteric veins and peripheral blood implies that some of these cells have the propensity to grow when trapped in capillary systems. Some treatment must be directed to destruction of these cells. Cole and co-workers<sup>9</sup> have demonstrated the effectiveness of nitrogen mustard in destroying free cells, cancer cell counts being markedly reduced after mustard solution is given. Lavage with mustard solution of the peritoneal cavity or any operative wound through which a cancer is excised, should reduce the incidence of wound implantation.<sup>13</sup>

The use of chemotherapeutic agents is not without danger. However, there has been a broad clinical trial of nitrogen mustard and dosage schedules for this drug have been established. We have been using the schedule suggested by Cole.<sup>9</sup> During the operative procedure, 0.1 mg. per kg. of body weight of the mustard solution is given intravenously. Another 0.1 mg. per kg. of body weight is



recently, other cytotoxic agents are being investigated throughout the country.

Chemotherapy as described is being used not for the effect on the gross tumor, which effect in the past has been disappointing, but to eradicate small clumps of cells in the blood stream and in wounds which may propagate themselves as metastatic or recurrent foci of cancer. Therefore, if the gross tumor can be cured operatively, the exfoliation of tumor cells which occurs before and during operation can be treated. If this is successful, we can look forward to diminished recurrence rates, lessening metastatic disease, and increasing cures.

We feel that the use of chemotherapeutic agents is a striking advance in the therapy of various cancers. At the present time the author advises the use of nitrogen mustard as described in all operations for cancer.

#### *Polyps and Sigmoidoscopy*

The origin of many colon cancers from pre-existing polyps is becoming a definite surgical concept. Therefore, the eradication of colon polyps is necessary. Barium enema with air contrast, and sigmoidoscopy, are employed for demonstration of polyps in the colon pre-operatively.

At all operations for colon cancer, the lumen of the remaining large bowel should be examined with the sigmoidoscope to detect other

diluted to 500 or 1000 ml. and used as an irrigating solution in the wound through which the cancer is excised. On the first and second postoperative days, 0.1 mg. per kg. is given intravenously. In a small series of both private and service type patients, one case of severe leukopenia has developed. This responded satisfactorily to treatment. As experience accrues, a more effective agent may evolve. Cur-

polyps which may be present. If found, they should be removed and frozen section should be requested. Further resection of the colon is mandatory if the polyp so discovered is determined to be malignant. The author insists that coloscopy should be a vital part of all operations for cancer of the colon. Before definitive operation, sigmoidoscopy should be performed to detect or treat polyps, if present, in the rectum and lower sigmoid. Cure of cancer of the colon by a satisfactory operation using precautions and safeguards outlined, is futile, if the surgeon has not examined the patient with the sigmoidoscope, who may have a malignancy or pre-malignant lesion in the rectum.

### *Professional Problem*

It should be apparent from the foregoing that bowel resections for cancer of the colon should be performed by experienced surgeons. Unfortunately, the occasional surgeon will advance his cutting career by attempting a bowel

resection. These operations are almost always inadequate as concerns length of colon and mesentery removed. These are usually wedge resections of the bowel or less. While post-operative recovery may be prompt and uneventful, the later occurrence of metastases is greater. To those who are privileged to work in places of referral for problem cases, the incompetence of such operators is quite apparent. It is unfortunately true, that this same denouncement applies to the surgeon who practices in his specialty, and who by lack of his own ability or knowledge, is incapable of offering to his patient the benefit of progressive aids made available to him by his colleagues.

Since the patient with cancer of the colon has the better opportunity of cure, than patients with lesions in other parts of the gastrointestinal tract, he should be given the advantage of good surgical treatment. This latter quality is not necessarily invested in all who operate.

### REFERENCES

1. Colcock, B. P.: Surgical treatment of carcinoma of the colon. *S. Clin. North America* 36:739, 1956.
2. Cole, W. H., Packard, D., and Southwick, H. W.: Carcinoma of the colon with special reference to prevention of recurrence. *J. A. M. A.* 155:1549, 1954.
3. Ferrara, B. E. and Phillips, R. D.: Respiratory arrest following administration of intraperitoneal ncomycin. *Am. Surgeon* 23:710, 1957.
4. Fisher, E. R. and Turnbull, R. B., Jr.: The cytologic demonstration and significance of tumor cells in the mesenteric venous blood in patients with colorectal carcinoma. *Surg. Gynec. & Obst.* 100:102, 1955.
5. Griffin, G. D. J., Judd, E. S., and Gage, R. P.: Carcinoma of the right side of the colon: operability, resectability, and survival rates. *Ann. Surg.* 143:330, 1956.
6. Grinnell, R. S.: Results in the treatment of carcinoma of the colon and rectum: an analysis of 2,341 cases over a 35 year period with 5 year survival. Results in 1,667 patients. *Surg. Gynec. & Obst.* 96:31, 1953.
7. Maynard, A. de L. and Turell, R.: Acute left colon obstruction with special reference to cecostomy versus transversostomy. *Surg. Gynec. & Obst.* 100:667, 1955.
8. Moore, G. E., Sandberg, A., and Schuberg, J. R.: Clinical and experimental observations of the occurrence and fate of tumor cells in the blood stream. *Ann. Surg.* 146:580, 1957.
9. Morales, F., Bell, M., McDonald, G. O., and Cole, W. H.: The prophylactic treatment of cancer at the time of operation. *Ann. Surg.* 146:588, 1957.
10. Ottenheimer, E. J. and Oughterson, A. W.: Observations on cancer of the colon and rectum in Connecticut: an analysis based on 5,572 proved cases. *N. England J. Med.* 252:561, 1955.
11. Roberts, S., Watne, A., McGrath, R., McGrew, E., and Cole, W. H.: Technique and results of isolation of cancer cells from the circulating blood. *A. M. A. Arch. Surg.* 76:334, 1958.
12. Rosi, P. A.: Selection of operations for carcinoma of the colon. *S. Clin. North America* 34:221, 1954.
13. Smith, R. R., Thomas, L. B., and Hilberg, A. W.: Cancer cell contamination of operative wounds. *Cancer* 11:53, 1958.
14. Swinton, N. W.: Recent trends in the treatment of cancer of the colon and rectum. *Am. J. Surg.* 92:727, 1956.





# CHEMOTHERAPEUTIC CONTROL OF MULTIPLE MYELOMA

JOHN R. SAMPEY, Ph. D.  
Furman University, Greenville, S. C.

An evaluation of the chemotherapeutic control of multiple myeloma should begin with the predominant role of urethan in the treatment of this neoplastic disease. Almost one half (46%) of the 485 patients surveyed in this study were on urethan therapy, and a remission rate of 87%, calculated from the reports giving both the number of patients treated and the number responding, is one of the highest among all leading antileukemic and antilymphoma agents.\*

ACTH and cortisone rank second in the management of multiple myeloma, but less than one in seven of the patients listed in Table I were treated with these hormones, and a remission rate of 50% is only fair. Only 9 of 31 recorded remissions were classed as good, whereas with urethan the count was 90 good to 70 fair.

Stillbamidine, triethylene melamine (TEM), and nitrogen mustards are three other frequently employed chemicals in this study, but the numbers treated are too limited to have statistical significance in calculations of remission rates. Almost a score of chemicals are grouped under miscellaneous agents, and these account for practically one tenth of the patients of Table I. The 36 remissions in this group indicate that some of these chemicals give promise of wider usefulness in the future control of multiple myeloma.

Table I  
Chemotherapy of Multiple Myeloma

Chemicals	No. of Cases	No. of Remissions		No. of References
		Good	Fair	
Urethan	222	90	70	32
ACTH/Cortisone	64	9	22	26
Stillbamidine	41	2	15	12
TEM	36	1	5	15
Nitrogen mustards	30	18	2	10
Miscellaneous	41	12	24	31

## Miscellaneous Chemicals

Several radioisotopes have been used in the management of multiple myeloma. Lindgren

reported good relief from pain and promising bone changes in 4 patients on  $P^{32}$  therapy. Norin recorded prolonged relief of pain in one of 11 cases on this isotope, and lessening of pain in 2 others for 2 weeks. Cooper noted some palliation in 2 cases on radiophosphorus. In 2 reports Block described good remissions in 4 patients treated with  $As^{76}$ . Kriss found 3 objective and 5 subjective responses to  $I^{131}$  treatments in 1954, and the following year he reported 3 of 7 patients were improved clinically up to 7 months with radioactive iodinated serum albumin (RISA), while 4 of 9 gained strength and had less pain up to 15 months on  $I^{131}$  alone. Anderson discovered a high concentration of  $Ca^{45}$  in the bone after administration of this isotope, but the response was poor, and  $Ca^{45}$  has too long a life to risk the formation of bone sarcoma from its use in multiple myeloma. Greenberg recorded good results with  $Y^{90}$ .

Several chemicals of wide usefulness in the control of leukemia and Hodgkin's disease displayed very limited application in multiple myeloma. Two reports by Fountain and one by Petrakis showed no prolonged benefit with 6-mercaptopurine. Petrakis also noted no appreciable benefit either from myleran in 2 cases of multiple myeloma, and Hyman described negative results in 4 patients on this cancerocidal drug. Holly found colcemid had no effect on 3 patients. And finally Wright reported only slight improvement in 4 of 8 cases on folic acid antagonists, while Burchenal found no response in one.

Phosphoramides gave better palliation in multiple myeloma. Shay described good subjective response in a patient on thio-TEPA, and Wright reported one of 7 showed some improvement with this compound. Maney described the development of thrombocytopenia in one patient on thio-TEPA.

Paterson observed fair response to triethyleneiminotriazine (M9500) in 2 publications,

\* Sampey, J. R., Am. J. Surg. 95, 970 (1958); J. South Carolina M. A. 54, 53 (1958). In press.

and Shanbrom employed E39 or ethylene-imino-quinone in the palliative treatment of 2 patients. Two cases failed to respond to guanazolo, according to Wright, and Kirsch found diamidine exerted little effect in one patient. Ramioul recorded clinical improvement and some recalcification in one case on pentamidine therapy, and Greenspan observed some palliation in 4 patients on alpha-peltation. Kabakow noticed relief of pain in 12 cases, following use of mytabrienediol, and decrease of calcium in the urine in 8 of 11 cases.

Antibiotics have shown little effects in multiple myeloma. Coste described one complete hematologic remission in 3 patients given Aureomycin. Actinomycin C gave some relief in one case, according to Field, and Gregory also noted some improvement in a patient on *bacillus subtilis* as an antibiotic.

#### *Limitations of Chemotherapy*

Several limitations to the chemotherapeutic

management of multiple myeloma have been reported. Four of these are associated with urethan therapy: Sanchez described toxic reactions observed with this drug; Flanagan attributed toxic nephrosis and massive hepatic necrosis to urethan, while Hazlett recounted the death of a patient with fulminating hepatic necrosis on combined urethan and cortisone therapy, and Kenny added a case of liver damage from urethan.

Gillhespy reported all 6 patients on stilbamidine were made worse. Kellock described a fatal duodenal perforation during prednisone treatment. Several multiple myeloma patients of Kenny developed a rapid downhill course due to ACTH therapy, and Maney found thrombocytopenia developing in a patient on thio-TEPA.

*Acknowledgments.* The National Library of Medicine and the libraries of Furman University and Greenville General Hospital made available the original literature.

#### REFERENCES

- Anderson, J., et al, Clin. Sci. London 15, 567-85 (1956)  
 Block, M., et al, J. Lab. Clin. Med. 41, 499-515 (1953)  
 Block, M., et al, *ibid.* 34, 1366-75 (1949)  
 Burchenal, J. H., et al, Am. J. Med. 7, 420 (1949)  
 Cooper, W. M., Am. Pract. 2, 852-4 (1951)  
 Coste, F., et al, Rev. Rhumat. 17, 569-72 (1950)  
 Field, J. B., Calif. Med. 86, 305-8 (1957)  
 Flanagan, J. F., Arch. Int. Med. 96, 277-80 (1955)  
 Fountain, J. R., Ann. N. Y. Acad. Sci. 60, 439-46 (1954)  
 Fountain, J. R., Brit. Med. J. 1, 1119-24 (1955)  
 Gillhespy, R. O., Birmingham Med. Rev. 18, 289-96 (1954)  
 Greenberg, J., et al, Proc. Am. Assoc. Cancer Res. 2, 303 (1958)  
 Greenspan, E. M., et al, J. Natl. Cancer Inst. 14, 1257-75 (1954)  
 Gregory, J. E., South Med. J. 43, 397-403 (1950)  
 Hazlett, B. E., et al, Blood 10, 76-80 (1955)  
 Holly, P. B., et al, Proc. Am. Assoc. Cancer Res. 2, 215 (1957)  
 Hyman, G. A. and Gellhorn, A., J. Am. Med. Assoc. 161, 844-9 (1956)  
 Hyman, G. A. and Reese, A. B., *ibid.* 162, 1368-73 (1956)  
 Kabakow, B. and Spencer, H., Proc. Am. A. Cancer Res. 2: 312, 1958.  
 Kellock, I. A. and Selare, G., Brit. M. J. 1:930, 1957.  
 Kenny, J. J. and Moloney, W. C., Ann. Int. Med. 46; 1079, 1957.  
 Kirsch, J. and Vulpian, P., Thérapie 6; 231, 1951.  
 Kriss, J. P., et al, Proc. Am. A. Cancer Res. 1; 27, 1954.  
 Kriss, J. P., et al, Radiology 65; 241, 1955.  
 Lindgren, E., et al, Acta radiol. 36; 49, 1951.  
 Maney, B. E. and Shen, S. C., Proc. Am. A. Cancer Res. 2; 324, 1958.  
 Norin, T., Nord. med. 58; 1254, 1957.  
 Paterson, E. and Boland, J., Brit. J. Cancer 5; 28, 1951.  
 Paterson, E. and Boland, J., Acta Unio internat. contra cancerum 9; 112, 1953.  
 Petrakis, N. L., et al., Cancer 7; 383, 1954.  
 Petrakis, N. L., et al, Ann. New York Acad. Sci. 60; 492, 1954.  
 Ramioul, H., Acta clin. belg. 5; 523, 1950.  
 Sanchez Medal, I., Gac. Méd. Mexico 83; 443, 1953.  
 Shanbrom, E. and Miller, S. P., Proc. Am. A. Cancer Res. 2; 345, 1958.  
 Shay, H., et al., Arch. Int. Med. 92; 628, 1953.  
 Wright, B. P., et al., Harlem Hosp. Bull. 4; 151, 1952.  
 Wright, J. C., et al., J. Natl. M. A. 43; 211, 1951.  
 Wright, J. C., et al., Acta Unio internat. contra cancerum 11; 220, 1955.

# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH Accelerated A-V Conduction

DALE GROOM, M. D.

Department of Medicine

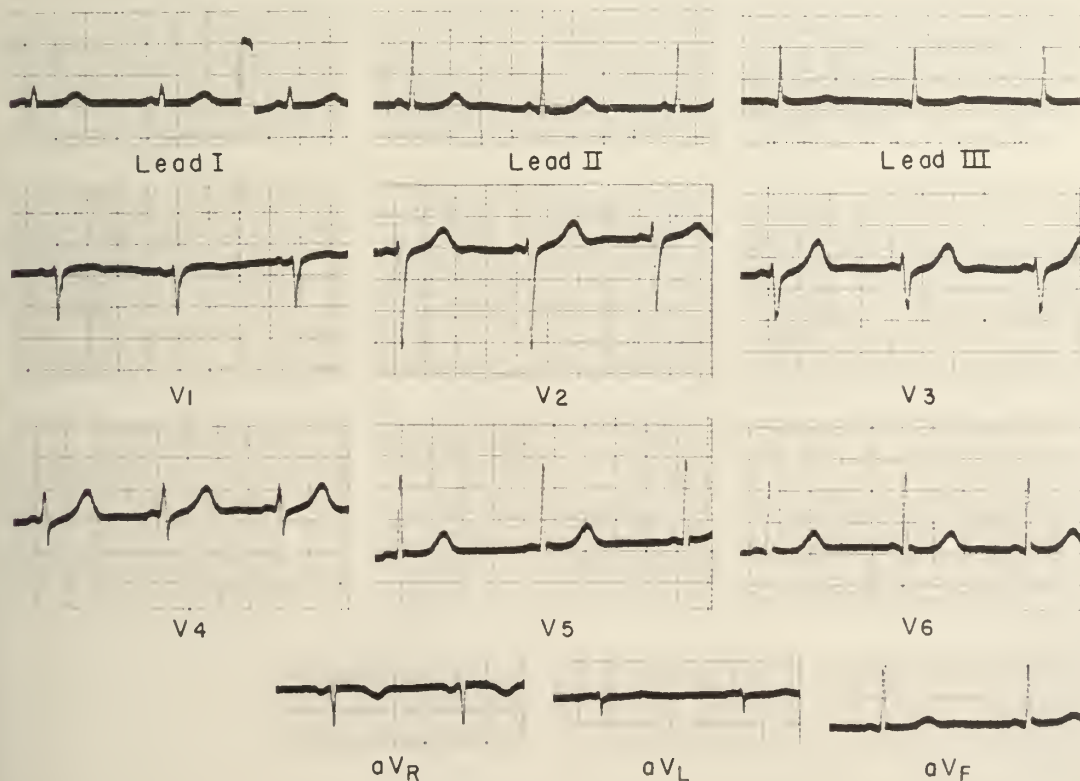
**Case Record**—A complete examination of a middle-aged lady complaining of arthralgias uncovered no objective evidence of organic disease. In particular, she acknowledged no symptoms suggestive of a cardiac disorder nor were there any physical or roentgenographic indications of one. The peculiarity of conduction observed in her electrocardiogram is noteworthy as an incidental finding.

**Electrocardiogram**—The abnormality in this tracing is the short P-R interval which measures slightly less than .010 sec. Throughout, the P waves appear to be of normal polarity, amplitude and width, but they merge directly into their QRS complexes without the usual intervening baseline. The rhythm is regular at a rate of about 70 per minute.

No widening or notching is evident in the QRS complexes, of 0.06 sec. duration. They show some variation with respiration (notably in  $V_2$ ) and a

vertical electrical axis which is directed downward from the two arms and toward the left leg electrode, aVf, where the deflection is entirely upright. As might be expected, height of the R waves decreases a little between  $V_5$  and  $V_6$  as the electrode is moved further to the left of the vertical axis.

**Discussion**—Less frequent and probably distinct from the Wolff-Parkinson-White<sup>1</sup> type of anomaly are cases such as this one in which the shortening of the P-R interval to 0.10 sec. or less is not accompanied by changes in ventricular conduction. There is no widening of the QRS, no notching (delta wave) of its initial deflection, and the time from onset of the P to end of the QRS (P-J interval) is decreased. Hence this anomaly neither obscures evidences of infarction nor simulates infarction or bundle branch block, as the W-P-W type may, because ventricular conduction is unaltered. The assumption is that, since the P waves are normal, the origin and transmission of the impulse is normal as far as the A-V node where, for some reason, it is not subjected to the usual delay but is transmitted immediately to the ventricles along their regular conduction pathways. The peculiarity





appears to be simply one of *accelerated atrio-ventricular conduction*.

Both this and the W-P-W type of anomaly are seen in ostensibly normal hearts. Another similarity between the two is their association with attacks of supraventricular tachycardia, although the association is reported to be less common among the cases having normal QRS complexes. If the mechanism is basically the same in both types it is difficult to understand how the aberrant ventricular conduction could fail to show. Conceivably it may involve an electrocardiographically "silent" area of myocardium, as has been suggested, or the pre-excitation around or through a portion of the node might render the conduction system refractory in some instances to the subsequent delayed impulse. Other theories postulate heightened transmission through an ischemic or otherwise damaged portion of the node, or a focus of increased irritability in the surrounding junctional tissue rendering it more vulnerable to excitation. Instances of accelerated A-V conduction in myocardial infarction, hypertension with left ventricular failure, and thyrotoxicosis have been cited in support of

these. But the very multiplicity of theories points up how little is actually known of the mechanism.

Still another and intriguing explanation is that this may be a functional disorder related to autonomic imbalance. Vagal stimulation is known to be capable of retarding atrioventricular conduction and, experimentally, the reverse effect has been produced by stimulation of the heart's sympathetic innervation. Accelerated A-V conduction has been described as a transitory phenomenon under conditions of emotional stress, and P-R intervals of less than 0.12 are said to occur with more than ordinary frequency in electrocardiograms of mental patients. Normally, of course, there is some shortening of the interval as the heart rate increases (especially in children), though rarely to this degree.

Certainly in this case, and perhaps in most, there is insufficient evidence to substantiate any of these explanations. Accelerated atrioventricular conduction is generally considered to be an interesting normal variant.

1. Groom, Dale. Electrocardiogram of the Month—Wolff-Parkinson-White Syndrome. J. South Carolina M. A. 53:180, May 1957.

## NEUROLOGICAL CONFERENCE MULTIPLE SCLEROSIS

O. RHETT TALBERT, M. D.

The case this morning represents a disorder difficult to diagnose, especially in the milder stages, and probably considerably more frequent in occurrence than we realize.

Case presentation (Dr. T. F. Hassell): Mrs. M. is a 36 year old housewife who gives as her present complaint, "I've had trouble walking and with my eyes".

The patient is uncertain as to dates of onset of many of her symptoms. She recalls an occasion about 8 years ago when, while visiting her neighbor, she heard her telephone ring. She ran to answer it and her legs suddenly gave from under her causing her to fall. She thinks she had several similar instances of difficulty controlling her legs thereafter, but attributed it to overwork and the hot weather.

In 1955 she became a policewoman, a job requiring prolonged standing and walking. She soon became aware that her legs fatigued quickly and she had to be changed from "walking a beat" to a desk job. Over the past 2 years weakness of the lower limbs had become increasingly evident. In the winter of 1957 she became unable to walk up or down steps without holding to the rail and even when walking on a flat surface she was noticeably unsteady. Within the past year the upper extremities have become weak or unsteady to the point that she can hardly hold a cup of coffee in her hand without spilling it.

About 4 years ago she began to notice occasional transient diplopia while driving, reading, or watching television.

In September, 1957 at her sister's wedding she repeatedly strangled while drinking punch, but attributed this to the fatigue and excitement of the occasion.

In the past 3 months she has experienced urgency of urination and, on several occasions, she has been incontinent of urine.

Four weeks ago she developed numbness and

tingling paresthesia of the left 4th and 5th fingers which persists to the present time.

Over the past 3 years she has been treated with ataractics and "mood ameliorators". A year ago she was found to have a low basal metabolic rate. A serum protein-bound-iodine test was normal. She took desiccated thyroid for several months without benefit.

Past history and family history reveal nothing relevant to her present illness. She married 17 years ago and has three children, ages 9, 10, and 15, all healthy. Her husband is healthy and the home situation is a happy one.

On examination she is healthy in appearance, chubby but not obese. She is pleasant, alert, and well oriented. She speaks distinctly. There is a slight tremor to her voice that could be attributed to the excitement of the examination. Her general mood is a happy one. On one occasion while describing her symptoms she suddenly became tearful but quickly recovered her composure and apologized. Memory and general fund of knowledge are normal. The optic discs are normal and visual fields are full on confrontation test. The eyes move conjugately in all directions and she converges well. On lateral gaze to either side a coarse bilaterally equal horizontal nystagmus develops. The remainder of the cranial nerves are intact. On the finger-to-nose test a mild but distinct ataxia is evident in both upper limbs, more so on the left. She does not sustain grip with the hands but no muscle atrophy or focal weakness is elicited. In walking she manifests no weakness of trunk or lower limbs, but when she turns to change direction unsteadiness is observed. This unsteadiness is very noticeable when she attempts to walk heel-to-toe or stand on one foot. There are no muscle fasciculations or other abnormal movements at rest. The tendon reflexes are hyperactive bilaterally, the right knee jerk and the ankle jerk being more active than the left. The toe response to plantar stimulation is repeatedly extensor on the right, normal on the left. Sensory testing yields normal response to pain, touch, position, and vibratory stimuli throughout, except in a small area over the left fingers where she reports a subjective feeling of numbness and tingling.

Stereognosis and tactile localization are intact.

On the general physical examination no abnormalities are elicited. The skin is normal. The thyroid gland is of normal size. Cardiopulmonary functions are normal. The blood pressure is 126/84 mm. Hg. There are no skeletal deformities.

#### DISCUSSION

Dr. Talbert: Here is a patient who has been ailing now for some 4 or 5 years, and has gained the impression that her symptoms were "psychogenic", no doubt because there has been very little other than a vague feeling of fatigue with a minimum of definite objective manifestations. On examination here this morning we are able to demonstrate very distinct but rather subtle abnormalities. Unless one is complete in the details of his neurological examination he is likely to miss them. In fairness I have to admit that in my own office examination preceding her admission to the hospital, I failed to elicit some of the findings later brought out by Dr. Hassell's careful examination.

In summary, this is a woman in her 30's who tells us that for the past five years she has been bothered by diplopia. Since she took a job three years ago requiring considerable walking she has noticed that her legs fatigue easily and that she is unsteady on her feet. In fact, some difficulty in controlling the lower limbs apparently occurred as long as 8 years ago, but seems to have subsided. When she cooks a meal, as she goes through the required activities with her upper extremities, they are weak and unsteady. Then, 4 weeks ago she developed numbness in the left 4th and 5th fingers and the lateral aspect of the hand. Several months ago she began to have difficulty with sphincter control. Now, if you put all these things together the history sounds impressive even if vague.

Then on examination the first thing that strikes one is nystagmus, both horizontal and vertical. While horizontal nystagmus is not of good localizing value, the finding of vertical nystagmus is a definite indication of brain stem disease. The one exception to this is that certain drugs, particularly the barbiturates and alcohol, may produce such nystagmus for a few hours. If one can rule out ingestion of these, vertical nystagmus should always be regarded as indicative of a disease process involving the brain stem. It is a sign that cannot be ignored under any circumstances. Then as you watch this woman perform, the next most outstanding abnormality is the disturbance of her balance. She cannot stand on one foot; she cannot walk a straight line to save her neck; yet there is no demonstrable weakness of the muscles to account for this. As she was walking there was a noticeable slight stiffness in her right leg. She did not move that leg quite as briskly as she did the left. Then there was the diminution of pain sensation that we demonstrated over the lateral aspect of the left hand where subjective numbness and paresthesias have been present for several weeks. The right ankle jerk is more active than the left. There is a Babinski sign on the right.

She has, then, three systems involved. First, the disturbance of equilibrium in the absence of loss of

position sense indicates cerebellar involvement. Secondly, the stiffness of the right leg along with hyperactive tendon reflexes and Babinski sign on the right indicate pyramidal tract involvement. Thirdly, the complaint of paresthesia on the left and our finding of diminished pain sensation in the left hand indicate a disorder of more recent onset implicating the cutaneous sensory (i.e. spino-thalamic) pathway. Her history of recurrent diplopia suggests an impairment of the pathways serving conjugate ocular movements. This is borne out too by the finding of nystagmus, although ocular movements are otherwise normal at present. There is no indication of involvement of the peripheral nerves, nor do the signs indicate nuclear or other gray matter involvement. Although multiple systems are involved, the signs are those of tract disease, i.e. bundles of fibers with their myelin sheaths which constitute the so-called "white matter" of the nervous system. One is led immediately to consider a disease of white matter occurring in a young adult and producing subtle changes over a period of several years. Multiple sclerosis is the most likely.

Multiple sclerosis is a disease whose symptoms usually begin between the ages of 15 and 40. An outstanding feature is its tendency to appear in repeated attacks, involving primarily the myelin sheaths of the nerve fibers in the white matter of the central nervous system, over a period of months or years. The attacks may vary in severity from one which produces only a vague sensation of numbness or paresthesias over a portion of the trunk or a limb to one in which there is temporary total paralysis of one or more limbs or blindness in one eye. Each attack characteristically produces symptoms that develop over a period of hours or several days, remain at a maximum for several days or weeks, then gradually subside in whole or in part. While improvement may be striking, each attack usually leaves its mark in the form of some slight degree of residual deficit of function. The long term effect of the disease, therefore, is to gradually disable the patient. The rapidity of this disablement depends on: a) the frequency with which the attacks occur, b) the severity of each attack in terms of destruction of tissue, and c) the site of the lesion in the neuraxis. Some patients may begin their attacks at an early age and suffer repeated, severe ones leading to total disability in 3 or 4 years. Others may have only 2 or 3 episodes, each undergoing essentially complete remission and occurring years apart. Such patients are capable of a normal life span with no significant disability. It is this latter type patient in whom the diagnosis is most likely to be missed.

While, as one might expect from a disease that ranges so widely over the nervous system, the clinical manifestations are many and varied, there are certain areas of white matter that seem particularly susceptible. Therefore, there are certain symptoms and signs that are to be expected commonly. The optic nerves, the white matter surrounding the ventricular



system in the cerebral hemispheres, the brain stem, the cerebellum or its brain-stem connections, and spinal cord are the areas most frequently attacked. *Retrobulbar neuritis*, manifested by the development of temporary blindness in one eye or a central scotoma is the clinical manifestation of optic nerve involvement. *Emotional lability* with or without the development of pathological laughing and crying is indication of cerebral hemisphere white matter involvement. In the brain stem, the most frequent manifestations are: a) *palsy of eye movements* with resultant diplopia and nystagmus; b) vestibular involvement with resultant vertigo, impairment of equilibrium and horizontal nystagmus; c) cerebellar involvement with resultant ataxia, nystagmus and slurring of speech. A lesion in the brain stem may also involve the sensory and motor tracts passing through, resulting in an accompanying motor or sensory deficit in the limbs or trunk. A plaque in the spinal cord is most likely to produce paraplegia or paralysis restricted to one limb or an area of numbness and paresthesia over trunk or limbs along with disturbance of sphincter control. A peculiar manifestation that occurs with significant frequency is *Lhermitte's sign* in which the patient describes a shock-like sensation down the back and limbs on flexion of the neck. This is said to be due to a plaque in the posterior columns at cervical cord level.

There is one final point worth emphasizing with regard to diagnosis. Because of the vague nature of some of the symptoms and the frequency with which one sees personality changes as a part of the clinical picture, the tendency is to make a diagnosis of psychiatric disease. This is especially true in the mild or early case in which objective findings are minimal or difficult to elicit. The diagnosis of hysteria, in particular, is likely to be entertained when the patient manifests an euphoric attitude toward his complaints, complains of a vaguely outlined area of numbness over a limb, or manifests a dragging or clumsiness of the limbs without any demonstrable reflex changes or

motor deficit on examination. Yet these are all frequent manifestations of multiple sclerosis. The only way to avoid this pitfall is to be painfully careful in the neurological examination of such patients, looking especially for nystagmus, a scotoma in the visual field of one or both eyes, and questioning the patient carefully as to occurrence in the past of such symptoms as temporary unilateral blindness, vertigo, or transient paralysis or sensory phenomena.

As to the management of patients with multiple sclerosis, the physician should make clear to the patient that the disease is not necessarily a dreadful one. In particular, it should be emphasized that the symptoms at hand will almost certainly improve and perhaps disappear completely. It should be emphasized that a well regulated life with avoidance of excessive fatigue and exposure to infections or extremes of climate is necessary. Continued activity within reasonable bounds should be encouraged. In certain cases physical rehabilitation in the form of bracing and other aids in ambulation are extremely valuable in helping the moderately disabled patient to continue a useful existence. As a group, these patients are surprisingly responsive to reassurance and mechanical aids. Since she has no focal weakness, our patient today is not a candidate for mechanical aids. She should be encouraged to continue her job but to request an assignment that does not require walking or standing beyond what she can accomplish without becoming fatigued or fretful. In general, she should be given an encouraging picture of her future, but avoiding excessive optimism. She should be told that whether she will have further attacks is entirely unpredictable, but that, should they occur, they too will run the general course of improvement. A diet of low fat content is considered beneficial in preventing attacks by some authorities and is certainly worthwhile in the patient who tends to excessive body weight. It is doubtful that anticoagulants or parenteral histamine, advocated by some, have any rightful place in the treatment of the disease.





# NEW PLANS FOR CARE OF CHARLESTON COUNTY INDIGENT OF IMPORTANCE LOCALLY AND ALSO TO STATE

WILLIAM H. PRIOLEAU, M. D.  
Charleston, South Carolina

It now appears inevitable that new arrangements will have to be made within a period of less than a year for the care of Charleston County indigent patients. On account of the poor physical condition of the Roper Hospital Main Building, in which these patients are housed, the Commission on Accreditation has placed Roper Hospital on the second and final one year accreditation. According to the report: "At the time of the next survey, by the Commission, the hospital must come up to Full Accreditation for three years, or be dropped." This leaves no real ground for hope that any extension of time will be granted. As Roper has no other space in which to place these patients, and has insufficient funds to build a replacement for the Main Building, the long standing arrangement with the county for their care must come to a relatively abrupt end. It seems paradoxical that, due to circumstances beyond its control, Roper Hospital, in order to maintain its accreditation, must close the department most responsible for its present high professional standing.

The seriousness of the situation is of importance beyond the humanitarian aspect. For many years the county indigent patients have been hospitalized at Roper under the professional care of the Medical College faculty. This arrangement has enabled Roper to serve the community as a highly accredited hospital with well developed services in the specialties. It has made available to the Medical College a large group of patients of a kind most valuable for undergraduate teaching and indispensable for satisfactory training of nurses, interns, and residents.

This situation does not come as a complete surprise. It was foreseen some ten years ago. A few physicians, who realized the seriousness of the problem ahead, made efforts to do something about it, but to no avail. In the past few years an increasing number of physicians have shown real concern over the ability of Roper, with its outmoded Main Building, to continue to operate in the presence of severe economic competition. Only recently have county officials given any indication that they realize the urgency of the situation. The public is not yet convinced that additional hospital beds are needed in the Charleston area. Certainly it has felt no lack of facilities for the private pay class. It is doubtful if the public is now prepared to support a bond issue for the construction of a hospital to take care of the indigent.

The manner in which the county indigent patients are to be hospitalized is of importance particularly to

the community, and also to the state. Their care by the county in close association with Roper Hospital would permit Roper to continue as an important teaching facility of the Medical College, and through this relationship to maintain its status as a highly accredited community hospital. Should the county indigent patients be provided for otherwise, Roper would be forced to become a hospital essentially for private patients, being able to take indigent patients only to the extent that income from endowments would allow, as well as any that may be provided for by tax and other sources. In such case the community would suffer by the loss to Roper of important facilities resulting in a much restricted hospital service.

Should Charleston County indigent patients be no longer available to the Medical College, it would be deprived of a large group of patients most valuable for undergraduate teaching and indispensable for a satisfactory program of training nurses, interns, and residents. During the past year the billing charges for the care of indigent patients at Roper was \$826,595.87 of which \$604,529.82 was appropriated by the county. These patients were hospitalized under conditions suitable for teaching and in immediate proximity to the Medical College. Compensation for such loss would be difficult financially and otherwise.

At present there is no apparent satisfactory solution to this pressing problem. It may be necessary to deal with it from both immediate and long-term aspects.

It is to be hoped that Charleston County will decide upon new construction in proximity to Roper so that a close working relationship can be established between the two institutions. Effort should be made to retain the desirable features of the present arrangement and to remove the more controversial ones, in particular those dealing with cost allocation. As a long-term program, this plan would be to the best advantage of the community and should be to the interest of the Medical College. Construction of such nature would require several years and would be dependent upon the passage of a bond issue.

The immediate aspect poses a more difficult problem. It is conceivable that the Roper Main Building can be continued in use for still several years, but its administration could not be under Roper Hospital at the cost of loss of accreditation. Renovation of this building has been advocated by some. Unless this could be accomplished in stages, it would be accompanied by the problem of care for the patients

during the period of remodeling. Renovation of the Main Building has not met with the approval of the engineering firm engaged to make a survey. It would likely be short-sighted financially and a makeshift at best. To quote from the recommendations of the Joint Commission on Accreditation of Hospitals: "2. Old Roper is deficient in fire safety and is structurally difficult to maintain in a satisfactory sanitary condition. There is considerable doubt whether these defects could be satisfactorily overcome even by a rather extensive modernization program."

A dispersal of the patients among the hospitals in the city may be possible, and not unlikely would have an appeal to the taxpayer. Most hospitals desire some indigent patients so as to raise their professional standing by having a type of service which is attractive to interns and residents. The county now owns two hospitals; Pinehaven and McClellan-Banks Hospital. The latter was built with provision for enlargement by the addition of a second floor. Such a solution may appear satisfactory from the humanitarian aspect, but it would make this group of publicly supported patients serve no effective purpose in broadening the scope and raising the standards of hospital facilities available to serve the community. Dispersal of the county indigent patients would also seriously impair their value as a source of teaching material for the Medical College. Every effort should be made to avoid it.

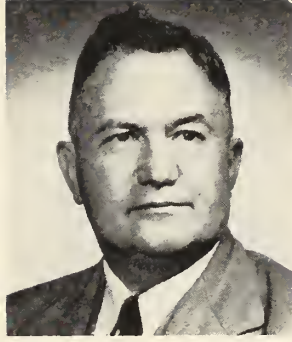
With regard to the short term aspect of the problem, the Medical College Hospital is the only physical plant in the area capable of caring for the Charleston County indigent patients as a group, and also housing the emergency department which is now located in the Roper Main Building. While the taking of a large group of indigent patients could retard its development as a referral institution, it would make possible a well-rounded educational program within its walls. The presence of the county indigent patients would enhance its value in undergraduate teaching and important phases of resident training. Any resulting

shortage of beds for the private patients of the full time faculty could be made up by placing some of their patients in other hospitals of the Medical Center group. If it is necessary for the Medical College to retain the professional care of this group of patients in order to meet its educational requirements, this may be the only possible solution for the immediate future. In such case, it should be considered as a temporary expedient to meet an urgent situation, pending action by the County to provide for its indigent in a manner which will serve the medical needs of the community to best advantage. A real danger in such a plan would be efforts in some circles to continue it on a permanent basis.

While the Medical College may meet its educational requirements by taking indigent patients from other counties, the loss to the community resulting from a program of dispersal of the county indigent patients would be irremediable at least for some years. The result would be a restricted hospital service available to physicians not members of the college faculty and to patients not eligible for admission to the Medical College Hospital. As county indigent patients are supported for the most part by local taxes they should be hospitalized in such a manner that they can be used for educational and training programs which enhance the scope and the standards of medical care available to citizens of the community.

While the Medical College Hospital is a valuable asset to the community in making available special skills and services, it does not relieve the community of the necessity of having its own hospital facilities adequate to meet its every day needs. It is difficult to make the average citizen aware that this is the case. Plans made in the next few months for the care of Charleston County indigent patients should not, in the long run, affect the development of the Medical College, but upon these plans will depend for some years to come the scope and standard of hospital care available to take care of the normal requirements of the community.





## PRESIDENT'S PAGE

It is with humility and pride that I assume the high office of President of the South Carolina Medical Association. Time waits on no one, yet it is a valuable essence of our being. It was just forty-six years ago that my distinguished father became the President of our society. His leadership and examples have set strides that have been difficult for me to follow.

I take over the reins from a most worthy predecessor who has accomplished much and in particular the contribution on a voluntary basis, the giving of \$10.00 per member to the American Medical Education Foundation. Let's continue this gift to the Medical School as most of the donations help the South Carolina Medical College. It is where you have your money that one's greatest interest lies.

I am humble as your President and ask for guidance and expect co-operation. There are certain principles by which we must abide by to hold the respect of the public. The Hippocratic Oath should be reviewed and read every six months or at least yearly. We are a loose, yet close knit organization as we are prone to take everything on a personal basis. We must be broader in this respect and "Do Unto Others as You Would Have Them Do Unto You."

If you are in the practice of medicine, as most of us are, there are a few suggestions which I would recommend:

1. Take care of your patients at all times, the rich and the poor alike.
2. When not available have another doctor cover for you, especially the emergencies which should be promptly attended.
3. Prescribe only what is necessary.
4. Civic responsibilities and citizenship.

Your preparation and education enhance you as a qualified participant in civic organizations and government operations including politics, if you please. Let's go Forward—"ONE FOR ALL AND ALL FOR ONE."

William Weston, Jr., M. D.



# Editorials

## COUNTY MEDICAL SOCIETY OFFICERS MEET

The 3rd Annual Conference of Medical Society Officers was held in Columbia on March 22 and proved to be a most interesting session. An indication of the content of the program follows.

There was considerable discussion of the subjects listed, and the audience was particularly favored in hearing Mr. Leo Brown, of The American Medical Association, talk on the subject of Public Relations and to hear The Honorable Robert W. Hemphill speak on The Physician in the National Picture. The attendance was moderately good, but it seems a pity that it is not larger when such pertinent and current subjects are under discussion. Certainly this type of meeting is very much worthwhile, and it is to be hoped that in the future the word will get around that it is a most desirable experience. It is the type of meeting which is likely to cover subjects which are not exploited too widely at the usual annual meeting, and which are definitely of concern to every officer and actually to every member of the county societies of the state.

An estimated 45 delegates from county medical associations attended the Third Annual Conference of County Medical Society Officers held Sunday, March 22 at Columbia.

The South Carolina Medical Association-sponsored session covered a broad field of problems ranging from county society business and finances to national legislation and public relations.

Rep. Robert W. Hemphill, congressman from South Carolina's Fifth District, closed the day-long meeting with a 30-minute address entitled "The Physician in the National Picture." Mr. Hemphill's remarks can be found elsewhere in the Journal.

Opening the session after lunch, Drs. Risley F. Haines of Columbia and Luther M. Mace of Barnwell presented a graphic picture of operating differences between the larger and smaller county associations in the state. Their

panel was moderated by Dr. J. Howard Stokes of Florence, treasurer of the South Carolina Medical Association.

Dr. Haines noted that the Columbia Medical Society embraces 219 members, maintains a library at Columbia Hospital and publishes both a magazine, "The Recorder," and a monthly newsletter to members. Annual dues are \$30 a year, of which \$5 is earmarked for the Permanent Home Fund, and \$2.50 for the library.

By direct contrast, Dr. Mace described the Barnwell County Medical Society which is nine members strong. The members pay annual dues of \$10 plus another \$10 which is placed in the national Medical Education Fund. He said speakers have been difficult to obtain, but that the Barnwell Society has viewed a number of films which are available through pharmaceutical companies.

The first panel discussion was preceded by an address of welcome from Dr. William Weston of Columbia, president-elect of the South Carolina Medical Association and senior Delegate to the American Medical Association.

Dr. Frank C. Owens of Columbia, chairman of the South Carolina Medical Association's Committee on Legislation and Public Policy, moderated the second panel which dealt with "Current Proposed Legislation."

Dr. Owens noted that the committee opposed legislation proposed in the State General Assembly which would have required the segregation of white and Negro blood after an investigation revealed the bill would result in the loss of about 15,000 pints of blood each year.

He reviewed other legislative problems including the continuing effort to completely obliterate naturopath practice in the state. It was reported that police action has been taken in at least one case and that law enforcement agencies are being urged to proceed more diligently.

Another panel member, Leo E. Brown of

Chicago, director of the Communications Division of the American Medical Association, discussed national legislation in the Congress.

He said there was concern over the possibility of a Presidential veto if the Keogh-Jenkins Bill passes the Senate. Mr. Brown noted the attempt to extend Social Security coverage into the health and hospitalization field, adding that a series of nationwide hearings probably will be held on the legislation.

"These national meetings are regarded as an attempt to determine prevalence of support for this type of legislation," he said and added: "These meetings do not minimize the threat of its passage, but only provide us with more time to show the inherent dangers involved."

Mr. Brown said that to prevent the passage of this type of legislation, the AMA should not merely object to its approval but should, instead, adopt a "positive program to analyze the needs of the aged and work out a method of providing care."

Dr. Julian P. Price of Florence, vice chairman of the Board of Trustees of the American Medical Association, outlined the method by which national policy of the association is established.

When there is no clearly adopted policy by the House of Delegates of the AMA, he said, proposed legislation in Congress is referred to the organization's Council on Legislation which interprets intended policy and refers its recommendations to the Board of Trustees. The Board of Trustees makes the final decision on what policy position the AMA will take on any given piece of legislation, he explained.

Dr. Joseph I. Waring of Charleston, editor of the "Journal of the South Carolina Medical Association," reported that the journal is now on a reasonably self-financing basis. He noted that papers for publication are difficult to obtain in South Carolina because of its relatively small size and added that secretaries of county associations could help immensely by providing news items on their organizations' activities.

Dr. Waring said there will be a redoubled attempt to procure more publicity for state

medical activities and added that plans have been made for broad coverage of the forthcoming meeting of the South Carolina Medical Association in May.

Mr. Brown, who participated in an earlier panel, returned later in the afternoon with the intriguing speech topic, "Where Angels Fear to Tread." His address covered public relations.

"The county society," he said, "is the keystone of the overall organization. It is at the county level that medicine is known at its best or its worst because of the quality of service rendered."

He remarked that public relations is "the public interpretation of what is done . . . and not what actually is done. It is the transfer of action into public interpretation."

Every County Medical Society, he said, should constantly evaluate these six points: 1. Emergency call systems. 2. Mediation committee and lines of remedy. 3. Press Relations. 4. Speakers Bureau for purposes of health education. 5. Public service projects. 6. Citizenship, the doctors role in his community.

Mr. Brown laid additional stress on the necessity for proper public interpretation by concluding:

"Christ, himself, suffered because of bad public relations. He suffered not because of anything he did, but because what he did was misinterpreted or misunderstood."

---

## NEWS

---

Dr. Robert F. Hagerty, assistant professor of medicine at the Medical College of South Carolina has been named president-elect of the Southeastern Society of Plastic and Reconstructive Surgeons.

Dr. Robert A. Ross of the University of North Carolina School of Medicine is the new president of the Tri-State Medical Association.

The physicians chose Dr. Furman Wallace, a Spartanburg, S. C., surgeon as president-elect.

Dr. Lawrence S. Hester of Charleston was a member of a panel of speakers at the 7th annual clinical meeting of the American College of Obstetricians and Gynecologists in Atlantic City, N. J., April 6-8.

Dr. Ambrose G. Hampton, Jr. of Columbia has been appointed to the staff of the American Hospital of Paris for one year, and he and Mrs. Hampton have left Columbia for France.

The appointment is a signal honor as the 32-year-old physician was chosen from doctors throughout the country. Only six medical posts exist in the unique hospital, which was created by an act of Congress for the benefit of Americans visiting or living abroad. Openings on the staff are infrequent and in much demand by American doctors who would like to further their careers through practice in a foreign country.

#### POLIO VACCINATION LAW PASSED IN NORTH CAROLINA

A House vote of 73 to 3 March 6 made North Carolina the first state in the nation with a compulsory polio vaccination law.

Over protests of "mass medication" the House lined up overwhelmingly. It passed the Senate two weeks before.

Under its terms, six-year-olds must have certificates of polio immunization to enter school next fall. The state will supply through local health departments free shots for children whose parents are unable to pay. The cost of approximately \$100,000 a year would be borne by the contingency and emergency fund.

"The state is assuming the responsibility of the parent for the well being of his child," Rep. Kiser charged in attacking the law's compulsory features.

Dr. Rachel Darden Davis, House member from Lenior, answered it is "the right and privilege of every child to receive the benefit of this great new advance in preventive medicine."

Its passage was a new victory for Gov. Hodges, who earlier in the day told his news conference he is pleased with progress of his legislative program. "I feel very good about it," he said.

---

## ANNOUNCEMENTS

---

The University of Southern California School of Medicine will offer another Postgraduate Refresher Course in Hawaii and on board the S. S. Lurline from July 29 through August 15, 1959. Experience with last year's course indicated that the participating physicians were able to devote more concentration than usual on the program because they were away from the distractions of private practice. It was felt that the teaching-learning process was improved because of the informal and friendly relationship that grew up among the participating physicians and the faculty.

In addition to the lectures, there will be workshops in ECG and X-ray interpretation as well as

problems of water and electrolyte balance and the differential diagnosis of jaundice. During most hours, several programs run simultaneously so that the participating physician may pick and choose the topics most suited to his needs.

Further information about the Course may be obtained by writing to the Director of the Postgraduate Division, USC School of Medicine, 2025 Zonal Avenue, Los Angeles 33, California.

---

#### COMMITTEE ON AGING—A.M.A.

A letter dated April 13 from Dr. Frederick C. Swartz, Chairman, Committee on Aging, American Medical Association, pointing out that on Wednesday, June 10, a special one-day session on "New Concepts in Aging" will be held during the A. M. A. Annual Convention in Atlantic City, which is from June 8 to 12. This session will present to the practicing physician a concentrated review of current thinking regarding health care of the aged, and to provide them with concrete recommendations which they can translate to their own older patients. This will include four panels devoted to Diseases Among the Aged, Nutritional Counseling, Promoting Physical Fitness, and Motivating the Older Person.

Cathcart Smith, M. D.

The Woman's Hospital Division of St. Luke's Hospital in New York City offers a one week course in "The Conduct of Labor and Delivery". This is for general practitioners and thirty hours Category I Credit is allowed by the American Academy of General Practice.

The course consists of lectures, demonstrations, work in the Prenatal and Postpartum Clinics and assistance in the Delivery Room. Enrollment is limited as to numbers. If interested, please write to Mr. Carl P. Wright, Jr., Director, Woman's Hospital, 141 West 109th Street, New York City for prospectus and details. The time of the course is October 8 through October 14, 1959. Enrollment will close on September 15, 1959.

---

#### MEDICAL COLLEGE OF GEORGIA and MEDICAL COLLEGE OF GEORGIA FOUNDATION, INC.

Announce a Clinical Workshop On  
THE ILL NEWBORN INFANT  
May 26, 27, 28, 1959. Augusta.

This course will focus attention on the ill newborn infant. The more common diagnostic problems will be discussed after an introductory session stressing the applicable physiologic deviations of these infants. Resuscitation, urgent surgery in the newborn, blood problems, post-maturity and the offspring of diabetic mothers will be presented by panels from the faculty. An open panel discussion is to be devoted to pertinent questions submitted by participants. Dr. Batson of the Visiting Faculty will discuss "The Staphylo-





*The skyline overlooking the world renowned Boardwalk in Atlantic City is seen from the vantage point of the famous Steel Pier. In June this popular seaside resort setting will become the center of activities when more than 15,000 physicians and their families journey to Atlantic City for the 108th Annual Meeting of the American Medical Association.*

coecal Problem."

#### Faculty:

Dr. Blair E. Batson, Professor and Chairman of the Department of Pediatrics, University of Mississippi

Dr. Victor C. Vaughan, III, Professor and Chairman of the Department of Pediatrics, Medical College of Georgia

Dr. William E. Laupus, Assistant Professor of Pediatrics, Medical College of Georgia

And other members of the faculty of the Medical College of Georgia.

For Further Information Write:

Dr. Claude-Starr Wright

Department of Continuing Education

Medical College of Georgia

Augusta, Georgia

Fee: \$25. COURSE WILL BE LIMITED TO TWENTY PHYSICIANS.

Application has been made to the American Academy of General Practice for Credit I, 16 hours.

The Postgraduate Obstetric-Pediatric Seminar which is sponsored by the Maternal and Child Health Divisions of the State Health Departments, and the Maternal Welfare Committees of the State Medical Associations of Georgia, Florida, Alabama and South Carolina is tentatively scheduled to be held August

20, 21, 22, 1959. The likely location will be Ellinor Village which is located approximately five miles from Daytona Beach, Florida. The program is being formulated and will be available for release soon.

The 1959 annual convention of the National Society for Crippled Children and Adults will be held Nov. 29 to Dec. 2 at the Palmer House, Chicago.

#### FELLOWSHIPS IN MATERNAL AND CHILD HEALTH

Harvard School of Public Health  
Maternal and Child Health Department  
Boston, Massachusetts

The Department of Maternal and Child Health of the Harvard School of Public Health announces the availability of two Fellowships for the year beginning September 1, 1959, to be granted to physicians who wish to work for a Master of Public Health degree or other advanced degree in Public Health, with specialization in Maternal and Child Health.

Candidates for these Fellowships should be graduates of an approved School of Medicine and, in addition, should have:

- A. Completed or be in process of completing the requirements for certification by the American Board of Pediatrics or the American Board of

Obstetrics and Gynecology, and give evidence of potentialities for satisfactory achievement in positions of administration, or teaching and field research; or

- B. Had specialized hospital training in pediatrics or obstetrics and experience in some aspect of a maternal and child health program, including school health or services for crippled children, preferably for at least a combined total of three years in training and experience.

The plan of study and experience offered is intended to meet the needs of individuals who wish to become maternal and child health administrators, members of teaching and research staffs in a department of pediatrics or obstetrics where the community aspects of maternal and child health are included in the curriculum or pediatric or obstetric consultants for a public health agency. The program of study will include two periods of planned and supervised field experience and study in a maternal and child health program.

The Fellowships will cover tuition and fees at the Harvard School of Public Health, an allowance for travel necessary in connection with the studies, a monthly stipend of \$400 for maintenance during the period of actual study, and an additional \$30 a month for each dependent.

Inquiries about these Fellowships should be sent promptly to Dr. Martha M. Eliot, Professor of Maternal and Child Health, Harvard School of Public Health, 55 Shattuck Street, Boston 15, Massachusetts, certainly before July 1, 1959. Application forms for admission to the School of Public Health and a catalogue of courses may be obtained from the Dean of Admissions at the same address.

#### INVITATION TO PRESENT PAPERS

The 13th International Congress on Occupational Health will be held in New York City at the Waldorf Astoria Hotel, July 25-29, 1960. The Scientific Program Committee invites submission of papers for presentation at the Congress. The Program will be devoted to the discussion of the following aspects of Occupational Health.

1. Administrative Practices
2. Medical Practices
3. Surgical Practices
4. Education and Training
5. Social and Legal Aspects
6. Environmental Hygiene
7. Influence of Environmental Factors in Health
8. Work Physiology and Psychology
9. Specific Industries
10. General

#### *Official Languages*

The official languages of the Congress will be English, French, German, and Spanish. However, papers may be read at the Congress in the language desired by the author.

# May is Better Hearing Month

for

## HELP to HEAR

write:

**AMERICAN HEARING SOCIETY**

919 Eighteenth St., N. W.

Washington 6, D. C.

### TRUDEAU SCHOOL OF TUBERCULOSIS and

### OTHER PULMONARY DISEASES

Forty-fourth Session  
1959

The Trudeau School will hold its Forty-fourth Session from June 8th to 26th, 1959, and continues to provide a unique opportunity for training in the field of chest diseases. This annual postgraduate course, conducted under the auspices of the Trudeau Foundation and supported by the Hyde Foundation, is able to provide outstanding instruction at a minimal tuition of \$100.00 for a three weeks session. Attendance at the Trudeau School carries with it some distinction as well as a thorough review for specialization in pulmonary diseases or for work in public health involving tuberculosis.

All inquiries should be addressed to the Secretary, Trudeau School of Tuberculosis and Other Pulmonary Diseases, Box 500, Saranac Lake, N. Y.

The American Venereal Disease Association has held its annual meeting April 27 and 28, 1959 in the Auditorium of Johns Hopkins Hospital, Baltimore, Maryland, in cosponsorship with the United States Public Health Service of the Tenth Annual Symposium on Recent Advances in the Study of Venereal Diseases.

## NEW EXAMINATIONS ANNOUNCED BY THE U. S. CIVIL SERVICE COMMISSION

Approximately 200 medical officers will be needed by the Federal government this year for professional assignment in all of the specialized fields of medicine, the Civil Service Commission has announced. Experience requirements range from doctors who have just completed their internship, to those who have had highly responsible professional experience. The positions are located throughout the United States and in foreign countries. Starting salaries range from \$7,510 to \$12,770 a year.

The major employers of medical officers in the Federal government are the National Institutes of Health; Army, Navy, and Air Force Installations (civilian service); the Public Health Service; Indian Service Hospitals; the Food and Drug Administration; St. Elizabeths Hospital in the District of Columbia; and the Children's Bureau.

Federal Medical Officers have an opportunity to do challenging research work in helping to maintain national health and to search for the causes of human diseases. They also care for patients in hospitals, clinics, military establishments, and other Government organizations. The greatest need in these establishments has been in the fields of general medicine and surgery, nutrition, public health, tuberculosis, venereal disease, roentgenology, pathology, radiology, physical medicine and rehabilitation, and in psychiatric medicine. Medical Officers serve as consultants in the administration of State medical programs, conduct programs and supervise medical personnel in industrial establishments which are under the direction of Federal departments, or conduct health programs in a Federal agency. They also make medical decisions which affect the enforcement of Federal laws and claims for compensation on the basis of physical and mental disability, and perform many other types of administrative work.

Doctors who desire further information regarding these positions should obtain a copy of Announcement No. 178 at a post office, or from the U. S. Civil Service Commission, Washington 25, D. C. Applications will be accepted until further notice.

---

## DEATHS

---

### DR. JOHNSTON PEEPLES

Dr. Johnston Peebles, 71 Hampton County physician for many years, died at his home in Estill April 15, after an extended illness.

### DR. E. H. THOMASON

Dr. E. H. Thomason died in Johns Hopkins Hospital at Baltimore, Md. where he had been a patient for the last several weeks. He was born September 26, 1908, at Honea Path and has been a general practitioner at Olanta since 1934 with the exception

of three years spent in the Army Medical Corps during World War II. He was a captain and served most of the time in the European theater. A graduate of Wofford College and the Medical College of South Carolina, he interned at the General Hospital in Spartanburg and spent a year at State Park before coming to Olanta.

Though a busy practitioner, he found time to render much service to the community. He was a steward and member of the Sunday school teaching staff in the local Methodist church, a charter member of the Olanta Lions Club, a member of the American Legion post, a member of the Masonic Lodge, a past president of the Florence County Medical Association, a trustee of the Olanta school for more than 12 years and was a member of the American Academy of General Practice.

---

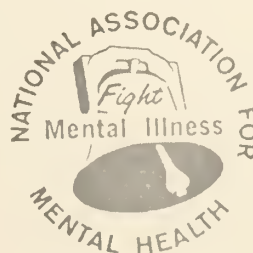
*The Thyroid Hormone-Plasma Protein Complex in Man. I. Differences in Different States of Thyroid Function* by M. N. Hamolsky, Haskell Ellison (Charleston) and A. S. Freedberg. J. Clin. Invest. 36:1486, Oct. 1957.

Three series of experiments were carried out which showed that thyroid hormone from patients with diffuse toxic goiter, labelled either endogenously by prior  $I^{131}$  administration, or in vitro by the addition of  $I^{131}$  tagged—thyroxin, and infused into dogs, disappeared more rapidly from the circulation than similarly labelled thyroid hormone from euthyroid subjects; greater amounts of radioactivity were incorporated in vitro into a rat diaphragm from thyrotoxic plasma labelled in vitro with  $^{131}$  thyroxin or  $^{131}$  triiodothyronine than from similarly tagged euthyroid plasma, or euthyroid plasma artificially enriched to hyperthyroid PBI levels.

It was felt that the results were not adequately explained by prevailing concepts and indicates that there is a difference in the qualitative nature of the thyroid hormone-protein complex in hyperthyroidism as compared to the euthyroid state or that there is a factor in the plasma of the hyperthyroid individual differing qualitatively or quantitatively in its effect(s) on the disappearance from the circulation, or on tissue uptake, of the labelled hormone moiety.

The results show that the uptake from the thyrotoxic plasma was greater than from the euthyroid plasma. The uptake from the thyroxine plasmas was less than from the triiodothyronine plasmas.

---







# BLUE CROSS . . . BLUE SHIELD



## THE COST OF BLUE CROSS

(Editor's Note: The following are excerpts from an editorial which appeared in the January 5 issue of the *Detroit, Michigan, Times*. We are printing them because we think it spells out the matter of rising hospital costs clearly and simply.)

" . . . What we all want—the public, the hospitals, the Blue Cross itself—is some fairyland solution in which everybody will get lavish care at a dime-store price. As long as we keep on living in such a dream world, we'll never solve anything.

"Meanwhile Blue Cross is damned if it does and damned if it doesn't—criticized by the unions, investigated by the state and county because its costs keep rising, and opposed by a few hospitals if it tries to put some sort of sliding ceiling on costs.

"We can see no prospect whatever that hospital

costs will decline. The nation is still in a phase of creeping inflation. The price of food, shoes, cars, and postage continues to rise.

"So will the wages of nurses, maids, and orderlies; so will the price of sheets, soap, potatoes, and medicine. The cost of going to the hospital will keep on rising, and we might as well stop kidding ourselves there is any way to let the cost of everything else go up and keep hospital costs steady."

"The whole thing come down, probably, to the exact attitude that all of us take when illness strikes.

"We say, in an emergency, 'I don't care what it costs; I want the best.' Yet in between emergencies, we complain, 'It costs too much.'

"There is precisely the point at issue. . . The issue is simple. The conflict is simple. And the answer, in a way, is simple. You can't have things unless you want to pay for them. . ."

## THE SHAME OF IT

The March 1958 issue of the Bulletin of the AAPHP discussed the crisis in state health department medical care programs for indigents created by the 1956 amendment to the Federal Social Security Act. The amendment specifically provided that federal funds for medical care programs for the indigent be administered by state welfare departments. The May issue of the Bulletin discussed the results of a conference of state health officers and physicians with the Commissioner to the Social Security Administration, Mr. Charles I. Schottland, in which the latter informed the former that a state health department could receive federal funds for its medical care programs only if the particular state welfare department conceded to allow this. This is another instance of the trend of directing medical programs into the jurisdiction of non-medical agencies due to the lack of medical leadership and the apparent discord of perspective between most sections of organized medicine and public health agencies.

Following the above conference by some weeks, Mr. Schottland and Dr. L. E. Burney, Surgeon General of the U. S. Public Health Service, sent a joint letter to each state health officer which appeared to be a plea for each state health department to accept the state department of welfare as the logical responsible agency to administer medical care programs. How this responsibility became settled in welfare departments is not discussed and most probably was evaded, since no agents in our country are more traditionally

involved in programs of medical care for the indigent than public health agencies and medical practitioners. The public health service was itself organized in 1798 to give medical service to seamen. Since colonial times in America, the local governments of towns, townships, parishes, and counties took the responsibility of appointing physicians to minister to the health needs of the indigent. Since 1872, the developing school medical services were largely entrusted to health departments cooperating with school boards. The provision of medical care to the indigent by welfare departments really received its greatest impetus rather recently with the passage of the Social Security Act in 1935. Not only is the welfare departments' handling of medical care quite recent, but it is also very aggressive — aggressive enough to have begun the usurpation of the traditional responsibility of health departments and the medical profession.

Has the Surgeon General merely acceded to the orders of his non-medical "bosses" in the Department of Health, Education, and Welfare, or has he bowed to the emotion-laden pressures generated by the more forceful of the confused elocutionists of organized medicine, or has he really expressed his frank sentiments in this matter?

If the trend of administration of medical care continues in the direction of non-medical agencies, the shame of it will be that medical practice will eventually become subject to those very forces which organized medicine is today so frantically but ineptly struggling against.



"Don't be silly, Mrs. Skolsky—I'm only looking at your varicose veins!"

Surgeon General Leroy E. Burney of the Public Health Service has announced that a "happy accident" of medical research has led to the discovery of a powerful new drug for the treatment of gout which is now undergoing clinical trial by scientists at the National Institute of Arthritis and Metabolic Diseases.

The drug itself, zoxazolamine, is not new, Dr. Burney explained. It has been widely used for several years as a muscle relaxant, but its possibilities in the treatment of gout are the result of a chance observation made during studies of the drug's metabolic breakdown in the body.

Dr. J. J. Burns of the National Heart Institute and researchers at the Mount Sinai and Goldwater Memorial Hospitals in New York, under a grant from the National Institute of Arthritis and Metabolic Diseases, were studying the biochemical fate of zoxazolamine in the body when they noticed large amounts of a white crystalline compound accumulating in the urine of patients receiving zoxazolamine as a muscle relaxant.

At first the crystals were thought to be a breakdown product of zoxazolamine, but chemical analysis showed that they were actually crystals of uric acid. It was this observation, made by Dr. Burns and his associates Drs. T. F. Yu, Lawrence Berger and Alexander Gutman, that gave the first clue to zoxazolamine's powerful anti-gout properties.

A larger and more intensive clinical trial of zoxazola-

mine is now under way in gout patients, directed by Dr. J. E. Seegmiller of the Institute's Arthritis and Rheumatism Branch. Studies to date have shown that the drug is approximately six times more potent than any other uricosuric drug now available. Although greater potency alone is not always significant (larger doses of less potent drugs can often produce the same effect as that from more potent drugs), the important advantage of zoxazolamine is that it produces a maximum uricosuric effect that is much greater than any that can be produced by other drugs.

In addition to zoxazolamine another uricosuric drug, known as sulfinpyrazone, still in the experimental stage, is being studied at the Institute. This drug also was developed by the same team of investigators. The action of these two drugs appears to be additive, so that when they are given together they produce greater uric acid excretion than either drug does alone.

The Surgeon General pointed out that these developments may increase the range of therapeutic action available to the physician in managing "problem" cases of gout, and promise relief to gout patients who have either not been helped by older drugs or cannot take them because of objectionable side effects.

## MERCY RIDES 2nd CLASS

by

William Barry Furlong

In the next 24 hours, almost 30,000 Americans—20 every minute—will be injured in some sort of accident. Not all of them will need an ambulance or hospital car, but you may be among the thousands who will. What kind of treatment can you expect? Will you be helped or hurt by it? Will the cost in pain and money be relieved or aggravated by your emergency handling?

Here's one answer: "In serious accidents, almost as many people are severely damaged by what happens *after* an accident as by what happens *in* an accident," says Dr. Robert W. Kennedy, surgical director of Beckman-Downtown Hospital in New York City.

Here's another answer: Almost three out of every ten accident victims can expect emergency handling that's only poor to fair, according to a five-year survey of 62 cities conducted by Dr. George W. Curry of Flint, Michigan, for the American College of Surgeons. This means that thousands of persons every day can expect—in their moments of greatest personal peril—as much hurt as help in the treatment that's supposed to save their lives.

These dangers are not remote or indirect. They can bring great pain and great grief to you and your family, perhaps within the next 24 hours: - - -

The real tragedy is that these are not isolated cases. In half of the nation's large cities, according to the ASC survey, the citizens can expect poor emergency service. (In Chicago, fewer than seven per cent of all accident victims reach a hospital in a first-class ambulance, according to the last detailed survey in

the city. Some 70 per cent of them must ride in taxis or on buses or with a passing motorist.) The people in smaller towns are better protected—but only slightly.

What are the most common faults of an emergency service?

1. The emergency services lack supervision, or even licensing, by the city.

Many cities, for instance, lack a specified phone number—such as those for the fire or police—where an ambulance can be reached. Consequently, accident victims may lie in pain for a tortuously long time, or they may be jammed into the car of some well-meaning but mistaken motorist, before an ambulance comes. In other cities, three or four ambulances race recklessly to an accident scene in order to be the first to get the business. In many places, particularly in small towns and rural areas, the ambulances are operated by morticians—who naturally face a conflict of interests in handling accident victims. While most morticians are quite ethical in handling accident victims, a few are frank in admitting that they would prefer to pick up a funeral at an accident scene instead of a live victim whose financial condition is unknown.

2. Ambulance attendants are frequently untrained in even the simplest first aid and, through sheer ignorance, often complicate injuries through mishandling.

"My own survey of ambulances in the state of Kansas shows that less than one-tenth of the ambulance attendants in Kansas have even rudimentary first-aid training, and those men are mostly war veterans," wrote Dr. John A. Grove of Newton, Kansas, in his state medical journal. "The attitude has been, 'Dump them in and let's get going. . . .'"

3. Many ambulances lack basic equipment—splints, oxygen-filled tanks, sterile dressings, obstetrical kits, etc.

The well-equipped ambulance carries more than 100 pieces of equipment from antiseptic soap to umbilical tape. Yet in many communities the ambulances carry little beyond a first-aid kit—if that. "Less than one-third of the ambulances in Kansas are equipped with splints," wrote Dr. Grove. "The vehicles themselves have 250 horsepower. They are long and red or black, and they have loud sirens and bright lights, and they can go 100 m.p.h.; but what other than a stretcher do they have inside them?" His answer: virtually nothing.

4. Some hospitals refuse to accept emergency victims because (a) they disrupt hospital routine and (b) nobody knows if the victim can pay his bills even if he should live.

What can communities with poor emergency service do?

For one thing, they can follow the example of Flint, Michigan. Nine years ago the emergency service in Flint was a public scandal. Today it is a

model of skilled emergency service.

The turning point came in August 1949. Twice within three weeks, private ambulances racing to accident scenes — to beat the competition — sped through red lights and crashed into other vehicles. The toll: both ambulance drivers were killed and the drivers of the other vehicles were critically injured.

Quickly the city, working with local medical men and morticians, moved in with a set of emergency service regulations:

A central dispatching system was set up in police headquarters. By calling the police, folks were assured of getting an ambulance. And no matter how many calls came in, the dispatcher would send only one ambulance to an accident scene unless a police officer at the scene requested more. That halted all races between the various ambulance companies to get to the accident first.

Priority on all emergency calls was given to companies operating ambulances exclusively; morticians operating ambulances became the second line of defense.

The city was divided into two zones—north and south. An ambulance could answer calls only in its own zone unless specifically assigned to another zone by the police dispatcher.

All ambulances had to carry certain specified equipment, and all ambulance drivers and attendants had to pass strict driving and first-aid tests, as provided by city ordinance.

For those companies and individuals who didn't want to follow the rules, the alternative was simple: their licenses would be suspended by the state. . . .

Reproduced with permission from *The Kiwanis Magazine*, August, 1958, by the Accident Prevention Program, Public Health Service.

---

## BOOK REVIEWS

---

**LONG-TERM ILLNESS.** Management of the Chronically Ill Patient, Edited by Michael G. Wohl, M.D., F.A.C.P. With the collaboration of seventy-nine contributing authorities. W. B. Saunders Co., Philadelphia. 1959. 748 pages. Price \$17.00

This publication presents in a single volume a rather comprehensive survey of overall present day management of the chronically ill patient. The first section deals with the general principles of home care, rehabilitation, psychologic problems and nursing procedures in the chronically ill patient. The second section discusses in very readable form the therapy of a wide variety of chronic illnesses affecting both young and old, as well as the management of degenerative disorders accompanying advancing age. Discussions by the various contributors are well organized and written in a clear and easily understood fashion.

This is not a reference manual of differential diag-



nosis and does not therefore aid the physician greatly in diagnosis of disease. It does present modern treatment methods in a very practical way. Discussion of supportive medical, psychologic, nursing and physical therapy in disorders in which such aspects are important is included, as well as specific drug therapy. The practicing physician will find this volume beneficial in organizing the care of patients at home as well as in the office and hospital.

Kelly T. McKee, M. D.

---

*THE CARE OF THE GERIATRIC PATIENT.* E. V. Cowdry, Editor. C. V. Mosby Company, St. Louis, Mo., 1958. 438 pages. Price \$8.00.

This handbook assembles in nineteen chapters the opinions of as many authors on problems more or less unique to the increasingly large segment of the population over the age sixty. Although the care of the aging is not a special field, such factors as declining earnings, declining sensory acuities, changing social status, increasing tolerance of disease and discomfort render an appreciation of these particular facets a necessity for the best possible care for these people. "Above all, he (the geriatrician) must have a liking for elderly people."

Among other things separate chapters treat psychologic, general medical, mental, surgical, anesthetic, nutritional, dental, and genetic aspects of the care of the elderly. Details of dietotherapy, drug administration, points of differential diagnosis are clearly set out. Careful consideration is given to nursing, nursing homes, hospitalization, rehabilitation, and organizations and services available to this age group. The book is a valuable short summation of practical details pertaining to some of the salient problems in the treatment of the geriatric age group.

C. M. Smythe

---

*DIFFICULT DIAGNOSIS, A GUIDE TO THE INTERPRETATION OF OBSCURE ILLNESS* by H. J. Roberts. 913 pages, W. B. Saunders Co., Philadelphia, 1958. Price \$19.00.

This is a book written for the practicing physician concerned with difficult medical diagnosis. It is in many ways a book like French's "Index of Differential Diagnosis", or Yater's "Differential Diagnosis".

The book is organized into sections which not only present analyses of diseases by manifestations such as fever of unknown origin and obscure post operative complications, but which also consider anatomically oriented diseases as in sections on the nervous system, heart and great vessels, etc. In a book which mentions or considers an almost numberless array of diseases and complications some conditions must necessarily be sketchily covered. This is amply made up for in an enormous bibliography of 103 pages which must contain over 2000 references, most of which are to relatively recent studies appearing in journals. The section on cutaneous medicine, which is accompanied by a 65 page atlas, has been well done.

Another added feature is an 163 page appendix which considers common laboratory and diagnostic procedures (with references) with a brief commentary ("Clinical Clues") on the clinical applications of each test. Finally, there is a 62 page double index, the first of which lists both signs and symptoms and the second general conditions.

The book is a large, well organized compendium of facts. It is not a text designed for reading, but rather a reference index. It would be valuable in all libraries, to men preparing for careers in internal medicine, clinicians faced with challenging diagnostic problems, particularly in hospital practice, and to all consultants. Finally, men preparing for their specialty boards in internal medicine might find it a useful book.

C. M. Smythe

---

*TREATMENT IN INTERNAL MEDICINE*, Harold Thomas Hyman, M. D. J. B. Lippincott Co., Philadelphia. 1958, 609 pages. Price \$12.50.

This volume is organized in ten sections and covers the infectious diseases, metabolic disturbances, neoplasms, allergies, collagen disorders, poisonings, disturbances of the circulatory system, disturbances of the blood and blood-forming organs, disturbances of the endocrine system, neuropsychiatric disturbances, and a final section relating to those problems often referred to specialists, or disease states usually considered as falling within the management area of certain of the medical specialists.

In each section Dr. Hyman has attempted to provide the most recently recommended forms of treatment, and his sampling of the world's literature is of encyclopedic magnitude. Throughout the work there are numerous tables and outline forms which could be particularly helpful in differential diagnostic considerations. For each specific entity or syndrome there is a brief review of background material and often some discussion of diagnostic criteria, followed by a presentation of the most recently recommended forms of therapy. Certain alternative approaches are presented in most instances, and comment on the relative advantages and disadvantages of various therapeutic measures are made. At frequent points, lists of therapeutic agents are gathered into roster form with suitable comment.

In any work of this type there are usually specific areas where certain inadequacies can be pointed out. In this particular, the discussion relating to the sections on the disturbances of the blood and blood-forming organs, disturbances of leukocytes, thrombocytes and the spleen, is not as thorough as would be desirable, particularly in relationship to the material included in background discussion of the differential diagnosis. Also the references to available articles discussing the therapeutic approaches which might be referred to, and which should give the practitioner broader concepts as to when and when not to employ certain of the recommended agents,

are not as well chosen as in some of the other sections.

The enthusiasm of the author for the use of steroids in a number of conditions where their use is endorsed will not appeal to some physicians, and likewise his empiric enthusiasm to "provide an anti-infective umbrella (penicillin and a tetracycline...)" is another area of debatable advisability. The book is well organized, with an excellent grouping of the subject matter, and voluminously indexed. Throughout the text there are numerous cross-references. For a busy practitioner this book will serve as a source of ready reference to current concepts of therapeutics, of specific as well as symptomatic and preventive types. Among one of the more valued features of the book are discussions of measures of importance in the long-term management of chronic illness, an area of management often neglected by other treatises of this type.

Vince Moseley, M. D.

---

*THE ANATOMY OF THE NERVOUS SYSTEM*, Stephen Walter Ransom, M. D., PhD. Revised by Sam Lillard Clark, M. D., PhD. 10th Edition. W. & B. Saunders Company., Philadelphia and London.

This is the Tenth Edition of this book which is recognized internationally as one of the best descriptions of the anatomy of the nervous systems.

It gives an excellently clear picture of the nervous system as a working mechanism, the subject is approached from the dynamic rather than the static point of view and the truly significant advances in the study of the relationship between structure and function are presented to help the physician enhance his diagnostic technique. It is thoroughly up-to-date and gives a balanced and clear picture of present views of the pyramidal and extrapyramidal system.

This book should be in the possession of every student of medicine; it is one of the few which will always be an essential in his medical library. If this is the fare of the undergraduates of Northwestern Medical School they certainly have cause to value their teachers.

Brian O'Connor, M. D.

---

*PEDIATRIC NEUROLOGY* by Stanley S. Lamm, M. D. 1st Edition, Landsberger Medical Books, Inc., New York.

It is difficult to review this text-book on pediatric neurology because it is difficult to assess its place in the teaching and understanding of this increasingly important subject.

It has many excellent chapters all of them have a good and up-to-date bibliography. Penfield's simple and sound classification of epilepsy has been used and the infections of the central nervous system have received the attention which they demand, therapy, probably of necessity, is scantily discussed. The qual-

ity of the illustrations could be improved and more could have been included advantageously. It is a pity that more attention has not been given to anatomy and physiology which are so essential to an understanding of neurological diseases.

As Dr. Lamm states, the relationship between pediatrics and neurology is continually growing closer and he has endeavored to point out the influence on each other of recent advances in both fields. It is a good introductory text for the students but will not satisfy the average resident for long.

Brian O'Connor, M. D.

---

• *DISEASES OF THE COLON AND RECTUM*. Edited by Robert Turell, M. D. 1296 pages in 2 volumes. 974 illustrations on 634 figures. Price \$35.00. W. B. Saunders Company, Philadelphia. 1959.

Last summer at the A. M. A. meeting in San Francisco, Dr. Robert Turell, in the role of an expectant author, stopped at my scientific exhibit booth to chat and, incidentally, to brief me on his forthcoming tome. After reviewing it, Dr. Turell's *Diseases of the Colon and Rectum* is readily recognized as a significant and impressive contribution to proctologic literature. Eighty-two authors, predominantly American, have written clearly and instructively the various chapters "to create a practical, progressive and complete, though not an encyclopedic textbook of the colon and anorectum".

The chapter on surgical anatomy, by J. C. Golliher, incorporates the newer concepts of applied anorectal anatomy as recently developed under the auspices of the St. Marks Hospital for Diseases of the Rectum and Colon, London. This superb chapter lucidly written and adequately illustrated should be required reading for residents who are learning to do anorectal operations.

Hemorrhoids and various techniques of hemorrhoidectomies, both new and old, are described by Richard T. Shackelford. Many who read the chapter will wrinkle their eyebrows when they see the picture and the description of the "rectal plug"—that horrifying item which most modern surgeons have happily discarded to the medical museums.

Turell's "Diseases of the Colon and Rectum" can be wholeheartedly recommended for all concerned with diagnosing and treating disorders of the unglamorous but very fundamental portion of the alimentary canal.

Leon Banov, Jr., M. D.

---

*CURRENT THERAPY — 1959, LATEST APPROVED METHODS OF TREATMENT FOR THE PRACTICING PHYSICIAN*. Edited by Howard F. Conn. W. B. Saunders Company, Philadelphia, 1959. Price \$12.00.

This most recent volume of an excellent and well established series of annual reports on Therapy lives well up to the earlier standards. It makes an excellent reference book for the practicing physician, and the



expositions of treatment are brief and satisfyingly lucid. Those who write them are of excellent standing, and allowing for the occasional personal preference of the reader, their advice may be taken as Gospel.

JIW

**THE BIRTH OF NORMAL BABIES.** Lyon P. Strean, Ph.D. Twayne Publishers, Inc. New York, 1958. Price \$3.95.

This book is a crusade by the author for the education of the general public concerning the crucial first trimester of pregnancy.

His basic idea of interruption of normal formation of vital organs and systems of the fetus by sudden fear, shock, emotional injuries, and drug reactions in the mother, seem to be upheld in theory by most recent investigators.

His experiments producing cleft palate in the rat by feeding cortisone at the time of fusion of this structure is impressive. His case reports in the human, however, start with the newborn infant who has a congenital deformity and work back through the mother's history of early pregnancy. She attempts to remember some traumatic experience in early pregnancy. The deformity of the infant is then blamed upon this experience.

This retrospective study, of course, is non-scientific and does not represent true sampling.

The book offers fairly interesting reading until the author loses himself in his enthusiasm for a theoretical problem.

I certainly agree with the author concerning the seriousness of the first trimester of pregnancy; however, I could not recommend this reading for the newlywed or for parents of a deformed child, who might in retrospect blame themselves for the deformity after recalling some trivial accident during pregnancy.

Louis E. Nesmith, M. D.

**NEW AND NON OFFICIAL DRUGS**—Containing Descriptions of Therapeutic, Prophylactic and Diagnostic Agents Evaluated by The Council on Drugs of The American Medical Association, 1959. J. B. Lippincott Company, Philadelphia. Price \$3.35.

The annual edition of this authentic and reliable publication brings as usual much dependable information. In the great flow of new products touted for therapeutic use, it is good to have a literary ship in which we can steer our course to avoid the rocks and shoals set up by over-enthusiastic promotion. It should be a handbook for every practitioner.

J. I. W.

**THE FUNCTIONAL ORGANIZATION OF THE DIENCEPHALON** by W. R. Hess. Grune & Stratton, Inc., New York. 1958. Price \$7.00.

This is an English translation and summarization of many of the important contributions of the noted

Swiss neurophysiologist, Prof. W. R. Hess. Professor Hess has been investigating the diencephalon for over a quarter of a century.

The book is divided into three parts; (1) the autonomic functions of the hypothalamus, (2) the extrapyramidal motor functions of the diencephalon, and (3) data on methods and instructions on experimental techniques.

This book is the analysis of much work, but is recommended primarily for those with substantial neurological and neurophysiological backgrounds.

L. C. M.

**PRACTICAL DERMATOLOGY** by George M. Lewis, M. D. F.A.C.P. 2nd Edition. W. B. Saunders Co., Philadelphia. 363 pages, 555 illustrations. Price \$8.50.

This is an excellent book on diseases of the skin for the medical student and for the general medical man. Dr. Lewis has brought the text up-to-date and has included a chapter on Basic Medical Sciences in Dermatology. There is a formulary appended which is well written and succinct.

The illustrations are excellent. The book is written in simple concise language and is limited to the common dermatoses of everyday practice. Only the best treatment for each disease is given. Diagnostic aids are given wherever they may be helpful.

The arrangement is practical and it is easy to look up either symptom or disease. A most helpful differential chart on page 91 covering the nine most common papulosquamous diseases of the trunk is typical of the book.

Recommended most highly as a good everyday book for the doctor's shelf.

John van de Erve, M. D.

---

## ABSTRACTS

---

*The Possible Role of Smegma in Carcinoma of The Cervix.* H. C. Heins, Jr., E. J. Dennis and H. R. Pratt-Thomas (Charleston). Am. J. Obst. & Gynec. 76:726-735 (Oct.) 1958.

The authors performed experiments on mice in whose cervixes and upper vaginas raw human smegma, obtained by retraction of the foreskin and evacuation of this material from about the glans in uncircumcised male inmates at the South Carolina State Hospital in Columbia, was applied repeatedly by 2 basic methods; these methods were by means of a metal speculum and by the injection of a single "dose" into the vagina followed by closure of the vaginal orifice with sutures. Biweekly vaginal injections of culture of 100% *Mycobacterium smegmatis* and biweekly injections of 100% *Myco. smegmatis* in culture with 5% cholesterol also were performed on mice. Of 88 mice used for the injection of raw smegma followed by vaginal ligation, epidermoid carcinoma occurred



in 8 (10%) and marked hyperplastic changes in 22 (25%). Thus, there were significant changes in 35% of the animals. These results show that carcinoma of the cervix can be produced by human smegma if the stimulus is continued for 14 months or more. Whole smegma, as well as some of its components, is stimulatory to the cervicovaginal epithelium of mice, and invasive carcinoma will eventuate if the stimulus exists. Whole raw smegma has proved to be the most effective stimulus in these experiments. The objections to the use of lower animals in reference to human cancer are obvious. A similar study with the use of an experimental animal of primate level is contemplated.

*Complications of Endotracheal Intubation.* William Hamelberg, M. D., (Charleston), C. Merle Welch, M. D., John Siddall, M. D., and Jay Jacoby, M. D. J.A.M.A. 168: 1959 (Dec. 13, 1958)

Complications occurring after endotracheal intubation for general anesthesia were studied in 1,932 patients, with special reference to the possibility of reducing post-intubation symptoms by the topical use of hydrocortisone. However, the topical use of hydrocortisone proved to be of no benefit in reducing the incidence of these symptoms.

The overall incidence of symptoms was approximately 45 percent, with the interesting finding that 3 out of every 5 patients with predisposing factors such as naso-gastric tube, nasal oxygen, or operations involving the oro-pharynx developed symptoms whereas in the group without these predisposing factors 1 out of 3 developed symptoms. A slight increase in the incidence of symptoms occurred in those patients judged to be difficult to intubate and in those patients who were intubated by the nasal route.

---

## SCISSORISMS

---

### LAMENT OF THE NORMAL CHILD

In November 1956, the Florida Pediatric Society held a meeting at Clearwater and, among others, were fortunate to have Dr. Richard E. Wolf of Cincinnati, a pediatric psychiatrist, speak to them on behavior problems of childhood. The paper has now been published in the *Journal* of the Florida Medical Association, for October, 1958, and is worth anyone's time to read. Space forbids a long review, but at the end of the article is a quoted poem, said by Dr. Wolf to be anonymous, in which there is food for thought. It is entitled: "The Lament of the Normal Child."

I was strolling past a school house, when I spied a sobbing lad,

His little face was sorrowful and pale.

"Come tell me why you weep," I said, "and why you seem so sad,"

And thus the urchin lisped his tragic tale:

"My school you know is a modern school with numerous modern graces  
And there they cling to the modern rule, "Cherish the Problem Cases."

From nine to three I develope me, I dance when I'm feeling dancy,

Or I lay on with my crayon the colors that suit my fancy,

But when the commoner tasks are done, deserted, ignored I stand,

For the others all complexes have, or a hyperactive gland.

Ah, how can I ever be reconciled to my hateful normal station?

Why couldn't I be a problem child, endowed with a small fixation?

Why wasn't I trained for a problem child, with an interesting fixation?

I dread the sound of the morning bell. The iron has entered my soul,

I'm a square little peg who fits too well in a square little normal hole.

For seven years in Mortimer Sears has the Oedipus angle flourished,

And Jessamire Gray, she cheats at play, because she is undernourished.

The teacher beams on Frederick Knipe with scientific gratitude.

For Fred, they claim is a perfect type of the anti-social attitude.

And Cuthbert Jones has his temper riled in a way professors mention.

I'm nothing at all but a Normal Child, so I don't get the least attention.

The others jeer as they pass me by. They titter without forbearance

He's perfectly normal they swiftly cry, With perfectly normal parents.

For I learned to read with normal speed; I answer when I am commanded.

Infected antrums don't give me tantrums, I don't even write left-handed

I build with blocks when they give me blocks; when it's busy hour, I labor

And I seldom delight in handing socks on the ear of my little neighbor.

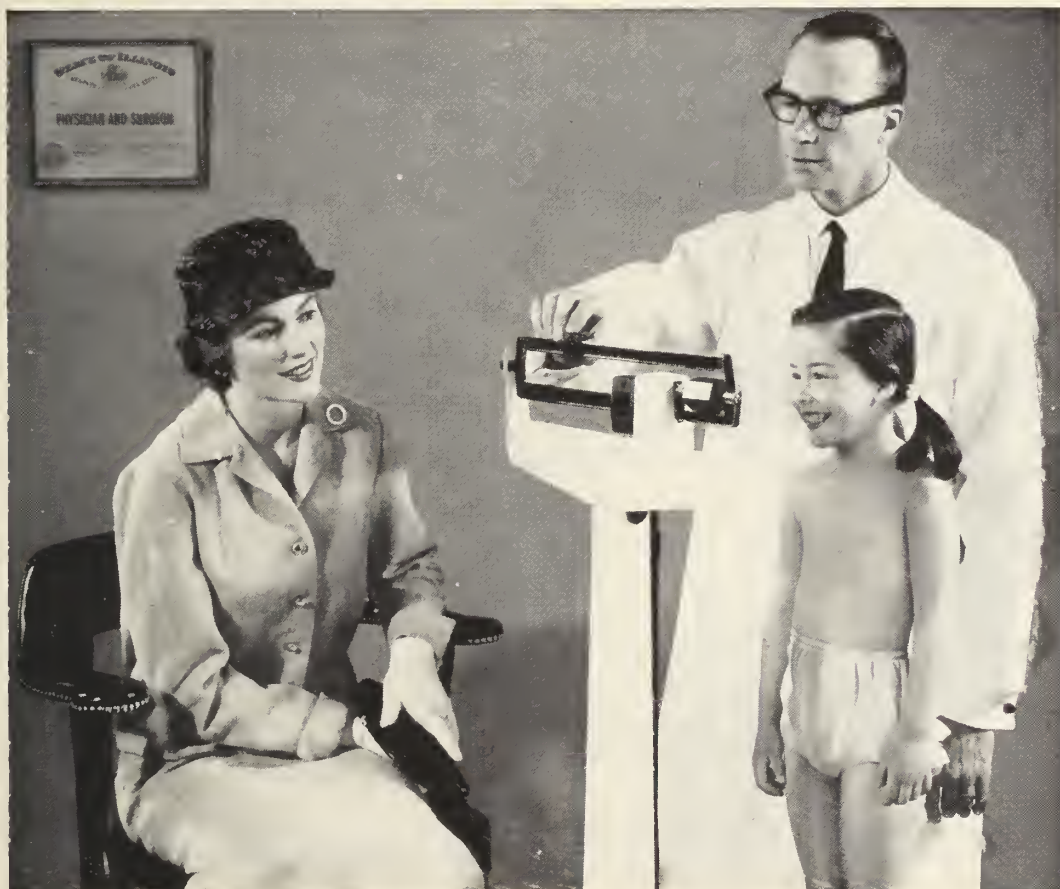
So here, by luckier lads reviled, I sit on the steps alone.

Why couldn't I be a problem child with a case to call my own?

Why wasn't I born a Problem Child with a complex all my own?

Will all "do-gooders" in this field please notice?





## Underweight Children Gain and Retain Weight with Nilevar<sup>®</sup>

One of the most convincing evidences of the anabolic activity of Nilevar, brand of norethandrolone, has been its ability to improve appetite and increase weight in poorly nourished, underweight children.

A highly important feature of the weight gain thus produced is that it is not ordinarily manifested by deposition of fat but as muscle tissue resulting from the protein anabolism induced by Nilevar.

**Anorexia and "Weight Lag" Study**—Brown, Libo and Nussbaum have reported\* consistent and definite increases in rate of weight gain in eighty-six patients, ranging in age from 7 weeks to 15½ years. This beneficial action of Nilevar was observed in the patients with organic and traumatic disorders as well as those whose only complaints were poor appetite and/or persistent failure to gain weight.

In this study, the weight gained was not lost

after discontinuance of Nilevar therapy although many patients did not continue the sharp gains effected by the drug.

The authors are of the opinion that Nilevar is a highly useful anabolic agent for influencing weight gain in underweight children.

When Nilevar is administered to children a dose of 0.25 mg. per pound of body weight is recommended and continuous dosage for more than three months is not recommended.

Nilevar is supplied as tablets of 10 mg., drops of 0.25 mg. per drop and ampuls of 25 mg. in 1 cc. of sesame oil. Further dosage information in Searle Reference Manual No. 4.

G. D. Searle & Co., Chicago 80, Illinois.  
Research in the Service of Medicine.

\*Brown, S. S.; Libo, H. W., and Nussbaum, A. H.: Norethandrolone in the Successful Management of Anorexia and "Weight Lag" in Children, Scientific Exhibit presented at the Annual Meeting of the American Academy of Pediatrics, Chicago, Oct. 20-23, 1958.

**TEN POINT PROGRAM  
OF THE  
SOUTH CAROLINA MEDICAL ASSOCIATION**

**1. Cooperation**

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

**2. Extension of Medical Care**

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

**3. Pre-Paid Hospital and Medical Care**

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

**4. Care of Indigent**

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

**5. Public Health**

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

**6. Health Councils**

To support the State Health Council in its announced program. To sponsor

the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

**7. Hospitals**

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

**8. Medical Colleges**

To support the Medical College of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

**9. Education of the Public**

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

**10. Political Medicine**

To prevent political control or domination of medical practice or of medical education.



# The Journal

of the

## South Carolina Medical Association

VOLUME LV

June, 1959

NUMBER 6

## CONGRESS AND THE MODERN PHYSICIAN

ROBERT W. HEMPHILL

**M**r. President and honored members of the South Carolina Medical Association:

It is a privilege to come to your convention and participate as a speaker on your program. I cannot think of any of you in any other way than the appreciation I have for the personal ministrations of the wonderful and understanding members of your great profession who steered me through a dangerous childhood in which we had no wonder drugs but had to depend on wonderful doctors. Some of them have passed on to great rewards, as I am convinced that all mothers and all doctors go to heaven. Some still work in complete dedication to the art of healing and soothing, and I pause to pay homage to Dr. G. A. Hennies, Dr. W. J. Henry and Dr. W. R. Wallace of Chester, who have refused to yield to the ravages of age, and courageously fill each day with renewed determination to continue in good works.

I am afraid there has been a recent tendency on the part of doctors "to look down their noses" on politics and politicians. To me, this is extremely unfortunate because of the increasing tendency to attempt to meet medical problems through Congressional action. Of the some 7000 bills before Congress at present, your Washington Office has informed me, the AMA, that they are following 213. In the preceding Congress, in the neighborhood of 704

Remarks of Robert W. Hemphill, Member of Congress, Fifth South Carolina Congressional District, before the meeting of County Officers of the South Carolina Medical Association, March 22, 1959.

bills have been followed; 26 of these were enacted into law. Unless Congress has the guidance of the medical profession in health bills, they will get it elsewhere and I hope they would give this help or keep still when they are subjected to what they consider undue Federal regulation.

Over half the Representatives and 83% of the Senators had their names on health legislation in the 85th Congress. For all intent and purposes, every Senator and Congressman is a potential proponent of health legislation. Hence, I urge your cultivating their friendship and confidence.

### *Doctors in Congress*

Doctors have taken an active part in Federal legislation from the time of the First Continental Congress. 361 physicians have served in Congress. 5 of them came from South Carolina.

David Ramsay served as a surgeon in the Revolutionary Army. He was State historian, author of several books and a member of the Continental Congress from 1782 to 1786.

Thomas Tucker was also a surgeon in the Revolutionary War, a member of the Continental Congress from 1787 to 1788 and was Treasurer of the United States from 1801 to 1828.

William Butler was a member of the 27th Congress.

John Bratton was a brigadier general in the Confederate Army and served in the 48th Congress.

Thomas Strait was the last of the South Carolina doctors in Congress and served in the 53rd, 54th and 55th Congresses and died in 1924.

I am glad to know that your medical society is doing a good job on keeping the people of South Carolina informed concerning medical care and medical care problems. This is as it should be for you are a very small segment of the population and unless your patients are informed about the advantages of the American system of medical care, I am afraid you will be under Government domination in a few years.

### *Medical Progress*

I am deeply impressed by the progress that has been made in medical care since the turn of the century,—within the lifetime of many of us here today.

In 1900, the death rate was 1,719 per 100,000 in our population. In 1956, it was 935—a decrease of 46%. In 1900, a baby at birth could expect to live to be 47 years old. In 1956, a male child could expect to live to be 67, and if she were a member of the “weaker sex” she could expect to live to be 73. If this difference in the life span of the sexes continues to increase, I am afraid we are going to have to find some other derogatory designation for women than the “weaker sex”.

We do not have any accurate statistics for infant mortality in 1900, but when figures were kept accurately starting in 1915, for every 1,000 living births we had 100 deaths in newborn babies. In 1956, we had 26. In other words, four times as many newborn babies died in 1900, per 1,000 living births, as did in 1956.

The changes in the death rate from specific diseases from 1900 to 1956 even more clearly indicates the change in our medical problems. In 1900, the most common causes of death

Leading Causes of Death in 1900	Rate per 100,000 population	
	1900	1956
1. Influenza and pneumonia	202.2	28.2
2. Tuberculosis, all forms	194.4	8.4
3. Gastro-enteritis	142.7	4.5
4. Diseases of heart	137.4	360.5
5. Cerebral hemorrhage and other vascular lesions affecting central nervous system	106.9	106.3

were infectious diseases. The five most common causes of death then are shown in the above table with the death rate per 100,000:

In 1956, the most common causes of death were the degenerative diseases. The five most common causes of death then are shown in the following table with the death rate per 100,000:

Leading Causes of Death in 1956	Rate per 100,000 population	
	1956	1900
1. Diseases of heart	360.5	137.4
2. Cancer and other malignant neoplasms	147.9	64.0
3. Cerebral hemorrhage and other vascular lesions affecting central nervous system	106.3	106.9
4. All accidents	56.7	72.3
5. Certain Diseases of early infancy	38.6	62.6

A number of factors enter into our better health record . . . shorter working hours, better clothing, better housing, better sanitation, better food, better knowledge of how to care for ourselves, and last, but maybe the most important of all, medical and hospital care. Formerly a patient went to a hospital to die. Now he goes to get well and sometimes for relatively minor illnesses and even for just a careful physical evaluation. So popular have hospitals become that we have had trouble trying to keep up with the increased demand for their services. The problems become so acute that the government entered into it in 1947, with the system of grants to nonprofit hospitals under the Hill-Burton Act.

From the start of the Hill-Burton Hospital Construction Act in 1947, to December 31, 1958, 4,315 projects have been completed or approved for building to provide 185,000 beds. In addition, there have been 1,143 health units which do not include beds. These health units include rehabilitation units, health centres, and out-patient departments. For every hospital bed built with Hill-Burton participation there are two built without such help or a total of approximately 555,000 beds in eleven years—a staggering number built under the free enterprise system in this country as compared to the one small hospital built in the British Isles under their compulsory state program of National Health Insurance in approximately the same period.

For those advocating a compulsory health insurance program in this country I commend a study of the above figures, also a study of the rate of growth of voluntary health insurance in England since the advent of the compulsory program of health insurance in England.

It has recently been estimated that one-quarter of the population of England and Wales is covered by health insurance. The reasons for this growth are said to be the extra charges and the means or needs tests "under certain aspects of the National Health Service. Another is the desire of a patient for privacy when ill. Still another arises out of the fact some persons cannot afford to wait for beds in the government general wards, these waits being, apparently, a real problem of some magnitude. For example, at the ends of 1956, 431,000 persons were reported to comprise the waiting list for hospital beds. The length of the waiting period varied by type of hospital and nature of illness. Hence, for general surgical cases the wait varied from 53 days in nonteaching hospitals to 70 days in the provincial teaching hospitals. For patients with ear, nose and throat diseases, the wait ranged from 87.6 days in the London teaching hospitals to 135 days in nonteaching hospitals. A still further reason is assistance in affording private specialist treatment; there seems to be a desire for freedom of choice in the selection of surgeons, specialists, and consultants."

The rigorous individualists which most Americans are, prefer to select the type of medical care, the type of hospital, and the physician of their choice when they are sick. A good example of this was before us last year in the Medicare program in which the dependents of the Uniformed Services were given the choice of care in civilian facilities paid for by the government or care in a military facility. There was a 17% drop in the number of dependents going to military hospitals but an over-all increase of 39% due to the use of civilian facilities. I feel our medical progress and our health progress have been accomplished because of the freedom we have in local control of our health facilities and our privilege of selecting the type of medical care and type of physician we want to care for us.

### *The Legislative Problem*

In a recent issue of the *US News and World Report* appeared an article "The High Cost of Being Sick." We whose ears are attuned to public opinion recognize this great periodical as a sounding board, and an honest one. This article reflects the public concern at the cost of keeping well, shall we say "the cost of staying alive."

Unfortunately America, in this age, too often looks to its government for a panacea for every ill, physical and otherwise. And so we find the Congress besieged with petitions for health security as a part of social security.

In 1957, Congressman Aime J. Forand introduced HR 9467, a bill providing for health benefits under the old age and survivors insurance program. Despite wide support, the measure did not pass.

On February 18, 1959 this gentleman introduced H. R. 4700, entitled A BILL, to amend the Social Security Act and the Internal Revenue Code as to provide insurance against the costs of hospital, nursing home, and surgical service for persons eligible for old-age and survivors insurance benefits, and for other purposes.

### *Widespread Support*

Important organizations have again strongly endorsed health benefits under the old-age, survivors and disability insurance program. These include the American Public Welfare Association, the American Nurses' Association, the National Association of Social Workers, the AFL-CIO, the Group Health Federation of America, and other organizations with an intimate knowledge of the problems of the aged and the values of social insurance.

The Governing Council of the American Public Health Association on October 30, 1958, adopted a strong resolution which states that "health services for the aged are inadequate throughout the nation" and supports "appropriate proposals to provide paid-up insurance for health services required by aged persons."

The American Hospital Association has recognized the need for some type of federal action and has been exploring alternatives.



He considers health and health insurance "the proper concern of government". The benefits would include:

- (a) 15 million eligible in 1960.
- (b) Any person entitled to monthly benefits under Sec. 202, Social Security Act would be eligible.
- (c) Hospital care to up to semi-private room and skilled nursing home services.
- (d) Surgical services and out-patient provision.
- (e) Exclusion of persons eligible for permanent and disability benefits.
- (f) Financing by increasing contribution rates by 1/4%, except self-employed pay 3/8%.

The statement of Mr. Forand includes:

*Special Safeguard*

Nothing in the bill shall be construed to give the Secretary or administering agencies authority over the internal management of participating institutions or over the practice of medicine or the manner in which medical services are provided.

It therefore appears that the sponsor of the bill fears the bureaucracy, mindful of the bad effect government continuation would have on modern medicine.

Some sort of legislation of this kind will pass—if not this year, certainly in the next three to five years. You fear it probably as a step toward socialized medicine.

We in Congress need your help and your guidance in making sure this program does not evolve into socialized medicine.

No hearings have as yet been scheduled. I hope that when they are you will take the leadership in helping write a bill which will carry out the fine humanitarian purposes we desire and have the safeguards we need.

Since you are taxpayers I have no hesitancy at discussing appropriations; I am anxious to dispel a widely held notion, which I am sure all of you know to be inaccurate, that only legislation which sets up a new program is important legislation. For one of the single most important tasks of Congress each year is the consideration of appropriation bills. The amount which Congress allows to be spent is of vital importance in determining the nature of old and new government programs. This in

turn determines the effect that government programs will have on each of you. Often the debates on appropriations bills receive little publicity in the newspapers, but you can be sure that they receive a great deal of attention from anyone interested in a particular program or a specific program.

My constituents from the Fifth District of South Carolina tell me they are for economy in Government. I guess the reason they feel this way is the same reason we all start to become a little troubled as it gets closer to tax time. One of the best ways I know of to stop taxes from getting any higher than they already are is to examine carefully every request for increased government spending. That means that I am not able to accept at face value each request for funds when the appropriations bills are considered. I have to think of the taxpayers back home. I must balance the value of the money to be spent against the burden imposed on the citizen who dishes out the money in the form of taxes.

In 1957 when the appropriations for the Department of Health, Education, and Welfare came up I spotted an item which gave \$1,800,000 to the Office of the Secretary. I noticed that this figure was higher than the amount requested in the previous year. I looked at the report of the subcommittee in charge of these appropriations and saw they had not been convinced that conditions had changed sufficiently to warrant such an increase. I searched the hearings only to discover that the Secretary, who was paid \$25,000 a year with two assistants receiving \$17,500 a year, was requesting higher funds for staff increases among other things.

Now in my mind these are pretty big salaries, and they mean the public can count on these men to do pretty big jobs. All things considered I offered an amendment to cut this item by \$250,000.

This year the Department of Health, Education, and Welfare will again request increases in their total appropriations. I am informed the amount of the total increase is 12 per cent. You can be sure that I will do my best to insure that every demand for more money is wise and necessary in these appropriations as in all others.

The Federal budget has many things in common with a household budget. The husband must keep some track of how many new hats his wife is buying. I consider my office a public trust. I think every Congressman owes it to his constituents to pay attention to how the taxpayer's dollars are being spent.

Even a few words on various major legislative proposals before the Congress give you an

idea, I am sure, that much of the national legislation I am considering affects your profession. That is why, earlier in this talk, I stressed the importance of your letting me know your viewpoints on these matters. For unless medicine comes to the aid of government, we may have government in medicine. We need your assistance and your viewpoints as we need the viewpoints of all citizens. I call on your medical statesmanship.

---

## DEAFNESS AND ITS TREATMENT, AN HISTORICAL SKETCH

R. W. HANCKEL, M. D.  
Charleston, S. C.

Since the special sense of hearing was developed in our evolutionary process, deafness in a variety of forms and in varying degrees has made its appearance and is becoming an increasing problem.

There are two types of deafness, conductive and nerve deafness. By conductive deafness we mean the deafness which results when there is some interference with the conduction of sound waves to the nerve of hearing in the inner ear. This point of interference may be anywhere in the outer or middle ear. By nerve deafness we mean the deafness which results when there is interference with the reception of the sound waves at some point along the neural mechanism of the nerve of hearing. A combination of these also occurs and is called mixed deafness.

Conductive deafness occurs when sound waves are air-borne and nerve deafness when they are liquid-borne.

Examples of conductive deafness are blockage of the ear canal by such diverse means as congenital absence of the canal, foreign bodies in the canal, impacted cerumen. Middle ear infection producing destruction of drum and ossicles or adhesions which interfere with ossicular motility and otosclerosis which also produces interference with ossicular motility.

by overgrowth of the bony tumor around the footplate of the stapes are examples of conductive deafness of middle ear origin.

Examples of nerve deafness are destruction of the end-organs of hearing by such things as acoustic trauma, presbycusis and infection. Interruption of the continuity of the neural mechanism deeper in its course may occur as a result of tumors, infections, and direct trauma.

Industrial noise as a cause of nerve deafness is becoming an increasing problem. The first record of the probable injurious effect of industrial noise on hearing was by Fosbroke in 1830 when he discussed the hearing loss noted among blacksmiths.<sup>1</sup> Weber commented on hearing loss in boilermakers and railway men in 1862.<sup>1</sup> Bauer in 1926 was the first to call attention to airplane noise as a factor in hearing loss.<sup>1</sup>

Efforts to obtain routine pre-employment and follow-up audiograms met with no success, because of the expense involved, until July 1948. At that time the New York State Court of Appeals decided in favor of the claimant Slawinski vs. J. H. Williams and Co. and awarded him \$1,661.25 for a hearing loss caused by industrial noise.

Since that time industrial management has been made increasingly aware of hearing loss due to auditory trauma. Committees from the

---

Presented December 4, 1958 at a regular meeting of The Robert Wilson Medical History Club.

American Medical Association and the American Academy of Ophthalmology and Otolaryngology separately and jointly and also from the various Armed Services have been formed and are busy studying various aspects of the problem such as:— 1—The loss by high and low frequency tones of the same intensity (high frequency tones produce greater loss). 2—The amount of hearing that an individual recovers after elimination of the noise. 3—The difference between auditory trauma produced by continuous everyday noise and intermittent unusual noise. 4—The relationship between presbycusis and high tone deafness produced by auditory trauma.

Noise was once defined as sound without agreeable musical quality. However, this has proved to be unacceptable because of difficulty in defining terms and also because even agreeable musical quality may be undesirable at times. The particular characteristics that converts sound into noise is its undesirability. Consequently the currently accepted definition of noise is any unwanted sound.<sup>1</sup>

At the present time very little can be done for nerve deafness. Only Meniere's syndrome, a dysfunction of the hydrodynamics of the inner ear, can be remedied by a restoration of the normal fluid balance here.

The first attempt to remedy middle ear conductive deafness of infectious origin came with the development of mastoid surgery in the early part of the 18th century. Jean-Louis Petit<sup>2</sup> was the first to perform a simple mastoidectomy in 1736. His posthumous publication lay dormant until 1863 when Schwartze popularized the procedure. The first simple mastoidectomy in the U. S. was by Dr. Lawrence Turnbull in 1860.

Surgery to combat deafness may be divided into four types:—

1) Surgery to combat secretory otitis; 2) surgery to combat acute infections of the mastoid, i.e. simple mastoidectomy; 3) surgery to combat chronic infections in the mastoid, i.e. modified radical mastoidectomy, tympanoplasty, radical mastoidectomy, and more recently, the musculoplasty procedure advocated by Rambo;<sup>3</sup> 4) surgery to combat otosclerosis, i.e. the fenestration operation popularized in this country by Lempert,<sup>4</sup> and

mobilization of the stapes, which was resurrected by Rosen.<sup>5</sup>

1. Secretory otitis, as its name implies, means an accumulation of fluid in the middle ear as a result of infection, allergy, or a combination of the two. The earliest surgical treatment of this type of deafness was simple myringotomy. This is still an accepted procedure and in addition removal of the accumulated secretions is facilitated by aspiration. In recent years refinements in this procedure have been perfected. These consist of myringotomy combined with inflation of the eustachian tube as advocated by Rawling.<sup>6</sup> Also suction may be applied to the canal after myringotomy while the tube is being inflated. Armstrong<sup>7</sup> has recently advocated the use of myringotomy, aspiration, and the insertion of a small gauge polyethylene tube into the opening in the drum. The tube is left in place for several weeks or even several months, if necessary, until the drum returns to normal color.

2. Simple mastoidectomy is primarily designed to preserve hearing when there is an *acute* infection of the mastoid. As was mentioned above, this was first advocated in 1736. The technical details won't be given here; suffice it to say that the mastoid cells are completely exenterated but the middle ear is left intact. A drain is inserted in the lower angle of the post-auricular incision and allowed to remain in place for a week or two. Occasionally it has been found necessary to perform a simple mastoidectomy in secretory otitis cases where the fluid has spilled over into the mastoid cells and the condition is not relieved by surgery of the middle ear alone.

3. Chronic mastoiditis may produce osteomyelitis, osteitis, adhesions in the middle ear, granulations and pus in this area, or a cholesteatoma. Also it is possible to have a combination of these pathological changes in the middle ear and mastoid. The end result is either a partial or complete loss of serviceable hearing.

The operative procedure most frequently used to combat a partial loss is a modified radical mastoidectomy. In addition to doing a simple mastoidectomy, the posterior bony canal wall is removed, and a flap opening is made into the membranous canal. This con-



verts the ear canal and the mastoid cavity into one. A skin graft may be used to hasten epithelialization of the cavity. The contents of the middle ear are left undisturbed.

Within the last several years Wullstein<sup>8</sup> *et al* have developed the technic of tympanoplasty. Reduced to its simplest terms, this consists of removing the involved structures in the mastoid and the middle ear and covering the denuded area with a skin graft, being careful to preserve an air space in the hypotympanum between the oval window and the eustachian tube. The skin graft serves to replace the damaged or even the completely destroyed drum. It comes in contact with some portion of the ossicular chain and serves to re-establish hearing to a serviceable level in the affected ear.

Before this attempt to *restore* hearing in the severely handicapped ear was made, the only operative procedure available was a radical mastoidectomy. In this procedure a simple mastoidectomy is done first, the bony posterior wall is then removed, and the drum and contents of the middle ear are removed except for the stapes. A flap is cut into the skin of the canal, converting the canal and the mastoid cavity into one as in the modified radical mastoidectomy. The main purpose of this operation is to prevent the spread of infection into the surrounding vital structures and to attempt to get a dry ear. It was first done by two general surgeons in Germany, Ernst Kuester and Ernst vonBergmann in 1888.<sup>9</sup>

Rambo<sup>3</sup> has recently advocated a musculoplasty operation for suppurative middle ear deafness. After doing a complete radical mastoidectomy, he utilizes a pedicle flap from the temporal muscle to construct an air-containing middle ear cavity. Pedicle flaps from the skin of the ear canal are laid on the muscle flap, and a stent of Fischer's paraffin wax is laid in the ear canal. The muscle flap serves as an excellent source of blood supply for the skin. The stent is left in place for three months and when removed leaves a well-epithelialized cavity. A flap is then raised over the horizontal semi-circular canal and a fenestra is made in this canal in the manner usually employed in doing a fenestration. The ear canal is repacked with the packing of choice and this is removed

in a week or so. The purpose of this operation is to provide a dry ear *and to restore hearing* in an ear that has been crippled by infection.

4. In 1938 Lempert<sup>4</sup> published his first report on the fenestration operation designed to restore hearing in cases of deafness caused by otosclerosis. He used an endaural approach, removed the bony canal wall and the incus and head of the malleus. The fenestra or window is made with a bur in the horizontal semi-circular canal. The fenestra is covered by a pedicle flap of meatal skin and drum. The canal is packed for several days with paraffin gauze. There have been many modifications of this procedure since its introduction. Lempert was not the originator of the procedure. Barany, Holmgren, Jenkins, and Sourdille<sup>10</sup> preceded him in this operation as far back as 1912. It was after hearing Sourdille's presentation at the New York Academy of Medicine in 1937 that Lempert devised his one-stage fenestration operation and popularized the procedure in this country.

The mobilization of the stapes operation was re-discovered by Rosen<sup>5</sup> in 1953. He put pressure on the stapes of a patient on whom he was doing a fenestration and felt the resistance to the pressure suddenly give. The patient stated that hearing had suddenly returned. He then decided to use the approach advised by Lempert in doing a tympanosympathectomy, elevating the skin of the canal and folding it forward with the attached drum to expose the stapes in the middle ear. He used local anesthesia. The posterior rim of the canal was curetted out when necessary to give a better exposure of the stapes.

This operation has subsequently been modified by a variety of ear surgeons including Housc, Goodhill, Myerson, and others too numerous to mention.

Mobilization of the stapes was first done in the latter part of the 19th century through a myringotomy incision, but was soon abandoned because of poor results and subsequent infection. The first surgeons to attempt the operation were Kessel, Boucheron, and Miott<sup>5</sup> in the last quarter of the 19th century.

In the latter 1930's and during the forties otology, especially otological surgery, was considered to be a dying specialty because of the

advent of sulfa compounds and the antibiotics which reduced markedly the necessity for mastoid surgery. However, from the

stimuli provided by Lempert, Rosen, Rambo, and others, temporal bone surgery is again coming into its own.

#### REFERENCES

1. Glorig, A.: Noise and Your Ear. New York, Grunc and Stratton, 1958.
2. Ballance, C.: Mastoid operation; a glimpse into its history. Arch. Otolaryng. 16:55, 1932.
3. Rambo, J. H. T.: Musculoplasty: a new operation for suppurative middle ear deafness. Tr. Am. Acad. Ophth. 62:166, 1958.
4. Lempert, J.: Improvement of hearing in cases of otosclerosis; a new, one-stage surgical technic. Arch. Otolaryng. 28:42, 1938.
5. Rosen, S. and Bergman, M.: Mobilization of the stapes for otosclerotic deafness; preliminary report on two years' experience. A.M.A. Arch. Otolaryng. 61:197, 1955.
6. Rawlins, A. G.: Chronic secretory otitis media in adults: a satisfactory treatment. Tr. Am. Acad. Ophth. 58:427, 1954.
7. Armstrong, B. W.: Chronic secretory otitis media: diagnosis and treatment. South. M. J. 50:540, 1957.
8. Wullstein, H.: The restoration of the function of the middle ear, in chronic otitis media. Ann. Otol., Rhin. & Laryng. 65:1020, 1956.
9. Sonnenschein, R.: A brief consideration of the history of the development of mastoidectomy. Ann. M. Hist. n.s. 8:500, 1936.
10. Sourdille, M.: New technique in the surgical treatment of severe and progressive deafness from otosclerosis. Bull. New York Acad. Med. 13:673, 1937.

## MYOCARDIAL INFARCTION WITH CARDIAC RUPTURE

CLAUDE T. PREVOST, M. D.  
Anderson, S. C.

**R**upture of the heart has been known as a clinical entity since 1647<sup>1</sup> when Harvey described it. Morgagni in 1765 reported 11 cases and blamed the cause of rupture on marked fatty myocardial changes. Marie<sup>2</sup> in 1896 was first to correctly associate coronary artery disease with atherosclerosis, and since this date authors have concerned themselves with the incidence, time relationship to infarction, etiology, and pathogenesis of cardiac rupture.

Rupture of the heart following myocardial infarction produces hemopericardium, cardiac tamponade, and usually sudden death, but occasionally there is a survival period of a few minutes to half hour.

The following case report is interesting because cardiac rupture apparently occurred on the second day, and again in the same location on the eleventh day after an acute infarction.

#### Case Report

A 63 year old white male was admitted to the Anderson Memorial Hospital on August 27, 1957, complaining of chest soreness. He had been well in all respects until about 2 A. M. August 26 when he awoke with severe, dull aching substernal pain that radiated into the precordium and down both arms.

The pain continued with varying degrees of intensity until about 7 A. M., at which time it began to subside. Throughout the day he rested well, without additional pain, but when he awoke on the morning of August 27 he experienced anterior chest soreness, whereupon he came to the office. An electrocardiogram showed an acute anterolateral infarction, and he was admitted to the hospital. There was no history of a previous similar episode.

The past and family histories, and review of the systems were noncontributory.

The patient was a well developed and nourished white male who appeared to be his stated age. He did not appear ill. His blood pressure was 140/90 mm. Hg.; pulse 100 with occasional extrasystole; respirations 18; and temperature 99.2° F. Ophthalmoscopic examination showed a grade II arteriolar sclerosis, without exudates or hemorrhages. The heart was without shocks or thrills, was of normal size and shape. The heart tones were of fair quality, and there were no murmurs at any valvular area. The rhythm was slightly irregular due to premature beats. The remainder of the physical examination was negative.

Voided urine was negative except for a trace of albumen, and 3 to 4 white cells per high-power field. The red-cell count was 4,960,000 cu/mm. and hemoglobin 15.0 Gm. per 100 ml. The white-cell count was 13,750 cu/mm. with 70 per cent segmented forms, 2 per cent stabs, 2 per cent eosinophils, 3 per cent juveniles, 19 per cent lymphocytes, and 4 per cent monocytes. Daily prothrombin determinations

varied from 29 seconds to 34 seconds until the day of his death, September 6, 1957.

### *Treatment and Course*

He was kept at complete bed rest. Dieumerol (bishydroxycoumarin) dosage varied from the initial dose of 300 mg. to 50 mg., with an average daily dose of 100 mg. Equanil (meprobamate) 400 mg. and Phenergan (promethazine HCl) 25 mg. were given at irregular intervals because of restlessness. On the afternoon of admission and on two occasions the following day he was given Demerol (100 mg.) because of chest pain.

He otherwise seemed to be doing well until about 6:45 a. m. August 29 when he again complained of chest pain and was given Demerol (100 mg.) Shortly thereafter he became cold, clammy, pulseless, and comatose. His blood pressure could not be obtained. Confusion, cyanosis, and irregular shallow respiration developed. He was placed in an oxygen tent. He showed no response to Vasoxyl (methoxamine-HCl) and at first no response to 4 mg. of Levophed (levarterenol bitartrate) in 1000 ml. of 5 per cent dextrose administered by rapid drip through a left ankle vein cut-down. However, about 8:20 a. m. a waxing and waning paradoxical pulse was barely palpable. Heart tones were distant, of poor quality, and also varied in intensity with respiration. He remained generally cyanotic with a mottled cyanosis of the abdominal wall. The neck veins were prominently distended. The clinical impression at this time was myocardial rupture with tamponade.

By 9 A. M. the blood pressure was obtained at 102/0. His shock-like state remained and at 10 A. M. a second infusion of 1000 ml. of 5 per cent travein in distilled water, with 8 mg. of Levophed, was begun. By 10:30 A. M. his blood pressure transiently was 150/130. Throughout the remainder of the day and night he remained cold, clammy and restless. There was frequent nausea and vomiting. He had occasional loose stools. He experienced recurrent chest pain from time to time controlled by 50 mg. of Demerol. However, by 2:30 P. M. August 30 he seemed quite improved. The pulse was stronger and more regular; his respiration was normal and his blood pressure was stabilized at about 130/70. During the subsequent days it remained within normal range. His heart tones were of surprisingly good quality, with only slight muffling to the apical first sound. There were no murmurs. Throughout this time he had received a constant intravenous drip of 8 mg. of Levophed in each 1000 ml. of infusion. During the several hours prior to its omission a purplish-blue area of skin discoloration, which eventually turned black and gangrenous, extended from the site of the intravenous cut-down upward along the anteromedial aspect of the right leg for a distance of about 20 cm. However, during the next few days the dark edges of this area were gradually replaced by a widening pink zone.

The following days were uneventful except for a

short period of auricular fibrillation on September 2, controlled by oral quinidine. His heart tones remained somewhat distant and were of fair quality. The rate varied between 80 and 90 per minute. Although his color and respiration remained normal he was kept at complete bed rest in an oxygen tent at 10 liters per minute. Meticorten (prednisolone) 10 mg. three times daily was given from August 31 to September 3, when it was reduced to 5 mg. four times each day. Parenzyme (trypsin) was administered, 1 ml. each 8 hours from September 1 until September 5, when the dose was reduced to 1 ml. each 12 hours. Rectal temperature recordings varied from 100° on August 28 to 103° September 1, after which the temperature gradually came down by lysis and remained normal.

On the morning of September 6 he felt well and ate a larger than usual breakfast. At 8:30 A. M. during ward rounds his heart tones were observed to be of good quality, though a little distant; there was a regular sinus rhythm. He had no complaints. However, at about 9:40 A. M. he had a sudden convulsive seizure and died.

At autopsy the pericardium contained some liquid blood and a soft red clot that weighed 420 gm. A 3 by 7 cm. partly organized thick clot covered, and was adherent to the left lateral aspect of the heart approximately centrally placed from the cardiac base to its apex. Beneath the fresher surface layers of this clot was a somewhat dry, rubbery more organized and adherent clot. In the center of this clotted mass was a shaggy, torn area which measured 1.5 by 1 cm. This opening was approximately 7 cm. from the apex. When the heart was opened a 0.2 cm. slit was found at the base of the left lateral bundle of the posterior papillary muscle. A 0.2 cm. groove director could be introduced without resistance and passed through to the external opening.

Gross sections through the anterior marginal wall of the left ventricle showed a zone of gray-red to yellow-red muscle that extended from near the apex to within 2.5 cm. of the base. The midpart of this muscle was yellow-brown, soft, soggy, and easily fractured. About this area there was subendocardial and subpericardial hemorrhage. The left ventricular wall measured 1.3 cm. at the base, 1.1 cm. through the midpart where rupture occurred, and 0.3 cm. at the apex. The heart weighed 376 gm.

There was a grade III atherosclerosis and calcification of the coronary arteries. The lumen of the left circumflex artery measured 1 mm. in diameter for a distance of 2.5 cm. where it was found to be occluded by a dry red clot.

There was some congestion and edema of the general lung tissue, with some hypostatic congestion of the basal lobes. The left lung weighed 450 gm., and the right lung 480 gm.

Microscopic sections of the left circumflex artery showed occlusion by fibrin, platelets, and red cells among which there were intermixed polymorphonuclear leukocytes, lymphocytes and monocytes.



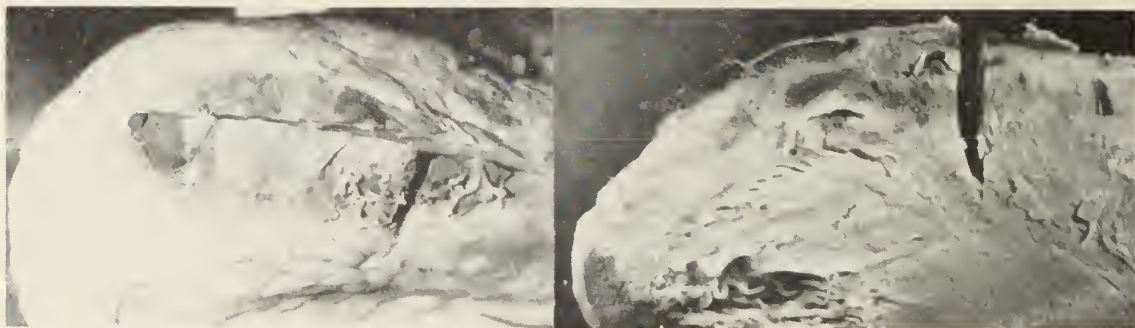


Figure 1, Left: External surface of heart, left lateral margin, showing subepicardial clot at site of rupture. Right: Cut section through necrotic myocardium at site of rupture, showing subepicardial clot.

There was marked fibrosis of the wall with atherosclerosis calcification, and patchy infiltration by lymphocytes.

Sections of the myocardium showed widespread necrosis, patchy hemorrhage, and infiltration by polymorphonuclear leukocytes, monocytes, and macrophages which contained rusty brown pigment. The necrotic muscle was bland eosinophilic. There were patches of granular basophilic necrosis with infiltration by polymorphonuclear leukocytes. The latter cells followed the intermuscular septa and through to the pericardium. Over the surface of the pericardium there was a layer of granular eosinophilic debris, red cells, and blood pigment. Red cells, platelets, and fibrin thrombi were found in many of the vessels throughout the necrotic muscle. Total necrosis included myocardium and pericardium.

#### Discussion

Krumbhaar and Crowell<sup>4</sup> reviewed the literature in 1925 and found a total of 654 cases, and they added 22 cases of their own. Gans<sup>2</sup> reviewed the literature in 1951 and studied the characteristics of 738 cases of cardiac rupture. These and other authors<sup>4,5</sup> placed the incidence of death due to cardiac rupture following myocardial infarction at about 9 per cent.

Cardiac rupture has been observed to occur most frequently within the first 7 days after infarction, but has been observed during the second week and rarely thereafter.<sup>6</sup> McLaren<sup>5</sup> reported a death due to cardiac rupture 8 hours following myocardial infarction. Foster<sup>7</sup> reported 2 cases in which cardiac rupture occurred within 12 hours after infarction, and Bean<sup>8</sup> reported one case with rupture which occurred within 14 hours. Mcakins<sup>9</sup> expressed the opinion that seldom does cardiac rupture occur later than four days after infarction. Gans<sup>2</sup> reported two cases in which rupture

occurred 9 and 12 days respectively after infarction.

Bean also described the case of a 69 year old Russian Hebrew who manifested symptoms and signs of cardiac rupture on the 4th day after infarction. He showed partial recovery but died 8 days thereafter in congestive heart failure. At autopsy "the tear was considered to be about a week old, with evidence of healing and endothelialization."

In the series reviewed by Gans<sup>2</sup> the position of the rupture was described in 80 patients. Rupture occurred through the left ventricle in 80.9 per cent, and through the right ventricle in 9.2 per cent of the cases. Rupture through other areas was comparatively rare. Anterior perforation occurred in 75 per cent, and posterior perforation occurred in 25 per cent. Rupture occurred most frequently within 5 to 6 cm. of the apex which is about half the distance from the cardiac base to the apex. Anatomically this is one of the thickest portions of the heart muscle but is also one of the greatest areas of stress. The cardiac apex is one of the thinnest areas, yet rupture seldom occurs in this area.

Mallory et al<sup>10</sup> expressed the opinion that infarcted myocardium showed no sign of healing within the first four days, but only signs of muscle necrosis and degeneration, usually with marked polymorphonuclear infiltration. When necrosis of polymorphonuclear cells occurred, the possible liberation of a proteolytic enzyme appeared to increase the softening and liquefaction of necrotic myocardium. Tearing of the myocardium seemed to result in the formation and dissection of sinus-like

tracts, the so-called ragged "dissection" type of rupture. A less common type of rupture described by Gans<sup>2</sup> is the "blow out" type. Lowe<sup>11</sup> stated that scars resulting from myocardial infarction tend to occur in planes just as injection experiments and anatomical preparations show that the smaller branches of the coronary vessels run in planes. Large wedge-shaped infarcts involving the whole thickness of the heart (more than one muscle group) will occur only when a main coronary artery is occluded.

The incidence of cardiac rupture seems to be increased if activity is continued following acute infarction. Of 22 cases of myocardial infarction examined at autopsy Jetter and White<sup>12</sup> found that 16 were associated with cardiac rupture (73 per cent). These findings suggest that continued activity following unrecognized infarction, increased the frequency of rupture. Edmondson and Hoxie<sup>1</sup> found that persistent hypertension after infarction increased the frequency of rupture approximately three times as compared with hypotension or normal tension after infarction. There appears to be no reported increase in incidence of rupture in patients with myocardial in-

farction who are allowed early bedside chair privileges. Also there is no reported increase in incidence of rupture in patients receiving anticoagulants following infarction. Dogs given Dicumerol after experimental coronary occlusion and infarction showed no increase in incidence and magnitude of hemorrhagic extravasations.<sup>13</sup>

Emotional strain and congestive heart failure have also been implicated as factors.<sup>2</sup>

### Summary

Cardiac rupture following acute myocardial infarction has an incidence of about 9 per cent. Rupture occurs most frequently within the first week. Factors which have an influence on the incidence are: (1) the size and location of the infarction; (2) the plane in which the initial myocardial tearing took place; and (3) factors associated with an increase in cardiac work such as hypertension, physical and emotional strain, and congestive heart failure.

Although death usually occurs within a few minutes due to or associated with cardiac tamponade, the case described apparently ruptured on the second day and again on the eleventh day following an acute antero-lateral infarction.

### REFERENCES

1. Edmondson, H. A. and Hoxie, H. J.: Hypertension and cardiac rupture. *Am. Heart J.* 24:719, 1942.
2. Gans, R. H.: Acute myocardial infarction with rupture of the ventricle. *Am. Heart J.* 41:332, 1951.
3. Krimbhaar, E. B. and Crowell, C.: Spontaneous rupture of the heart. *Am. J. M. Sc.* 170:828, 1925.
4. Friedman, S. and White, P. D.: Rupture of the heart in myocardial infarction. *Ann. Int. Med.* 21:778, 1944.
5. McLaren, J. A.: Spontaneous cardiac rupture eight hours following myocardial infarction. *Quart. Bull. Northwestern Univ. M. School* 29: 234, 1955.
6. Friedberg, C. K.: *Diseases of the Heart*. Philadelphia, W. B. Saunders Company, 1951, p. 456.
7. Foster, L.: Spontaneous rupture of the heart. *Quart. Bull. Northwestern Univ. M. School* 20: 209, 1946.
8. Bean, W. B.: Infarction of the heart. III Clinical course and morphological findings. *Ann. Int. Med.* 12:71, 1938.
9. Meakins, J. C., cited by Gans<sup>2</sup> (Personal Communication).
10. Mallory, G. K., White, P. D., and Salcedo-Salgar, J.: The speed of healing of myocardial infarction. *Am. Heart J.* 18:647, 1939.
11. Lowe, T. E.: The significance of myocardial scars in the human heart. *J. Path. & Bact.* 49:195, 1939.
12. Jetter, W. W. and White, P. D.: Rupture of the heart in patients in mental institutions. *Ann. Int. Med.* 21:783, 1944.
13. Blumgart, H. L., and others: The effect of dicumerol on the heart in experimental acute coronary occlusion. *Tr. A. Am. Physicians* 60:227, 1947.



# THE OBSTETRICIAN'S RESPONSIBILITY IN PERINATAL SURVIVAL

J. DECHERD GUESS, M. D.  
Greenville, S. C.

It is indeed comforting to the obstetrician to be able to hand over to the skilled and interested pediatrician all premature, defective, and damaged babies as soon as they are born. However, when he does so, he has not absolved himself of responsibility for the past, the immediate, or the future condition of the baby. It well may be that the pediatrician will be able to undo damage done by the obstetrician by reason of his lack of care or skill during pregnancy or labor. It may be that his task will be to maintain life and establish health in connection with conditions for which no one can be blamed.

It is my purpose in this paper to discuss briefly the extent of the responsibility of the obstetrician in attempting to assure not only survival but normally healthy survival of the infant during pregnancy, labor, and the early neonatal period.

In 1957, there occurred 63,375 live births in South Carolina. The ratio of white to colored births was roughly 4 to 3. No further differentiation by color will be made in this study, although it is a well recognized fact that there are important differences in perinatal and infant mortality in the white and colored races. These differences are not characteristically racial. They are dependent in the main on economic, educational, and environmental factors.

Vital statistics dealing with obstetrics and newborn infants are related to 1000 live births. That is a convenient and easily ascertained base. However, it does not allow portrayal of the whole statistical picture because it excludes from the statistical base those pregnancies which end with stillbirth and those which terminate by early abortion. In my discussion of the accompanying tables, I shall try to relate the several incidences mentioned to

the total number of obstetrical deliveries tabulated.

There were 64,683 births reported in South Carolina in 1957. Of these, 1,308 were stillbirths. Stillbirths made up approximately two per cent of all births. (Table I)

TABLE I  
SOUTH CAROLINA — 1957

Live births, total	63,375
Stillbirths (after 20 wks. gestation) (Rate 206 per 1000 live births)	1,308
Total births	64,683
Premature live births (after 20 wks. gestation) (Rate 83.5 per 1000 live births)	5,290

Slightly more than eight per cent of all live births resulted in premature babies. Fortunately, the total mortality in this group of premature babies was only 399 or a bit more than seven per cent. That figure reflects our improved facilities and the improved skill of our pediatricians. It reflects no glory on the obstetrician.

Table II suggests the extent of infant wastage. There were 64,683 births. Of these babies born, 1,308 were already dead at birth. Two thousand and one of those born alive did not survive their first year of life. There are no available statistics indicating how many of these live born babies died within a few moments or a few hours after birth.

TABLE II  
SOUTH CAROLINA — 1957

Live births, total	63,375
Infants, born alive but dead within 1 yr. (Rate 31.6 per 1000 live births)	2,001
Stillbirths (after 20 wks. gestation)	1,308
Abortions (prior to 20th wk. gestation)	?

Dr. Fred Adair has so aptly said: "Many so called live births are removed from dead births by very slight evidence, such as the twitching of a muscle or a questionable heart beat. Many of these infants never had a chance of survival . . . Beginnings of life are too often associated with the endings of life."

There is no way of even approximating the

Read at the annual session of the South Carolina Medical Association, Columbia, S. C., May, 1959.



extent of gestational wastage by abortion. A glance at tables three and four will give some suggestion as to the probable extent of early postnatal death.

In table III are listed those deaths which were probably more or less preventable. If preventable, the prevention was the obstetrician's responsibility. They were more or less under obstetric control, and each infant lost from causes tabulated in this table was an obstetric failure.

TABLE III  
SOUTH CAROLINA — 1957  
PREVENTABLE INFANT DEATHS

Prematurity, unqualified	371
Prematurity with subsidiary condition	28
Birth injuries	144
Postnatal asphyxia & atelectasis	226
Maternal toxemia	14

No effort should be made to balance the number of deaths listed in these tables with the total number of deaths. There is considerable and unassessable overlapping and duplication in the several categories.

Of the causes listed in this table, one may postulate with reasonable assurance that most, if not all, of these babies died within a few hours after birth.

The deaths tabulated in table IV were probably not preventable.

The monstrosities and those babies with congenital deformities not compatible with life may have died very promptly. Many of them probably lived beyond the limits of the perinatal period. These deaths from deformities must be classified as unavoidable.

TABLE IV  
SOUTH CAROLINA — 1957  
PROBABLY NOT PREVENTABLE INFANT DEATHS

Monstrosity & other congenital malformations	190
Hemolytic & hemorrhagic diseases	37
Ill defined diseases	79
Pneumonia, diarrhea & other sepsis	92

The deaths from ill defined diseases is a group which defies further breakdown. It is possible that some conditions included should have been placed in another more definite category.

The deaths from pneumonias, diarrheas, and other infections may have occurred at any time within the first year of life. They may have been present at birth or they may have been contracted very soon after birth.

Congenital pneumonia is a frequent complication of prolonged labor, or labor with a long lapse of time between rupture of the membranes and birth. Although it may be true that broad spectrum antibiotics do not pass the placental barrier in significant amounts, I believe they should be begun when the membranes have ruptured and delivery is not imminent.

If any of the diseases listed in this table be intra-partum, the obstetrician must accept the responsibility for the resulting death.

The two most important dyscrasias of newborn infants are erythroblastosis and hemorrhagic disease. Little, if anything, can be done to prevent them. Much can be done to prevent babies from dying because of them. Complete exchange transfusions, repeated one or more times if necessary, cure erythroblastosis. Its need must be recognized early. It is the obstetrician's obligation to recognize the probability of the condition and to check the baby by the laboratory examination of cord blood. It is his responsibility to be prepared to begin an exchange transfusion promptly, or to have forewarned a pediatrician, so that he will be so prepared. The need for titer checks on Rh negative, pregnant women has been over-emphasized, and such checks are of little value. They are of no practical value in other blood group sensitizations.

Although the routine administration of vitamin K to the mother early in labor and to the baby shortly after birth has been said to be of little value, Dr. Edith Potter believes that it should be given, and so do I.

Dr. Potter has stated that inadequate or abnormal pulmonary ventilation of the lungs is most often responsible for early infant death. In pre-viable babies, it accounts for nearly all deaths. The development of hyaline membrane, causing as it does atelectasis by resorption, is responsible for most of the deaths of viable babies.

The principal causes of perinatal deaths are injury at birth, immaturity, congenital malformations, and respiratory complications. Of these, only congenital malformations are not preventable theoretically.

Malformations are the result of inheritance or of environmental conditions existing in

early uterine life. The role of maternal nutrition in causing or in preventing infant malformations is presently receiving considerable consideration. The possible role of viral infections in the mother during the first trimester has come into prominence within the last few years.

Dr. Potter has stressed that anoxia may affect the baby before birth, even causing its intra-uterine death. Prenatal causes of anoxia are cord prolapse, or compression, prolonged tetanic contraction of the uterus, premature separation of the placenta and placenta previa. After birth, the principal cause of anoxia is excessive maternal sedation, amnesia, or anesthesia during labor. Any sedation or anesthesia may be excessive in premature labors.

The most frequent type of deadly birth injury is laceration of large intracranial vessels. It may result from abnormal position, cephalopelvic disproportion, excessive application of the forces of labor, either spontaneously or more often as the result of pitocin stimulation, or unskillful manipulation or use of instruments, especially incorrectly applied forceps.

Internal podalic version and extraction is not done so quickly and with so little skill now as it was only a few years ago. It is the most dangerous of all the manipulative forms of delivery. The dangers are to both mother and child. In a Chicago Board of Health study covering 14 years and almost 900,000 births, the mortality rate in cases of podalic version and extraction was fifteen times that of delivery by low forceps and four and one-half times that of delivery by cesarean section.

The greatest hazard to the newborn is prematurity. Almost one-half of all neonatal deaths are associated with, although possibly not primarily caused by, prematurity. It, of itself, is probably not a valid cause of death except in previable babies. Dr. Fred Adair some years ago suggested that the term previable be used to designate those infants in whom the prematurity or immaturity was a valid cause of death.

What is prematurity? Actually there is no way to measure accurately the degree of physical development of a baby. An estimated period of gestation is at most only an estimate. Length was at one time believed to be the

best indicator. Most of us are inclined to rely on the birth weight. Its limits, however, are wide. Mature infants may weigh as little as 5-1/2 pounds (2,500 gm.) or they may weigh as much as 10 pounds (4,000 gm.). Most babies who weigh as little as 3-1/2 pounds are premature. Some babies weighing 10 pounds are postmature.

Births which occur less than seven months after the first day of the last accurately recognized and recorded menses may be considered premature. Six and one-half months is, perhaps, an acceptable marginal period of gestation between non-viability and viability. These opinions are those of Adair. He states that actually about 10 per cent of immature babies weighing 2-1/2 pounds survive, if they receive excellent care. That weight would correspond with a gestational period of about six months. He defined excellent care as the avoidance of all factors arising during pregnancy, labor and the immediate postnatal period which would tend to be a handicap to survival. The principal factors referred to are trauma, respiratory interference, thermal, circulatory, nutritional, infections, and the blood dyscrasias. This is a formidable group and their control lies rightly within the province of the obstetrician until after respiration is established and the lungs have begun to expand.

All attempts to control maternal complications of pregnancy and labor tend to improve the prognosis of the fetus. In a series of cases reported by E. S. Taylor, one-third of the mothers had complications of pregnancy or labor, and that group provided two-thirds of the infant deaths from prematurity. This suggests that prevention and proper handling of the complications of pregnancy will produce the best immediate results in premature prevention and survival.

Prolonged labor increases perinatal mortality. Early recognition of primary uterine inertia, active supportive treatment by rest and fluids, and, after rest, judicious use of pitocin are the indicated measures.

General anesthesia of only a few minutes given near the end of the second stage of labor is damaging at times to full term babies. It is always hazardous to premature babies.

It is a wise rule to avoid general anesthesia.

respiratory depressant narcotics, amnesic and tranquilizing drugs in prematurity, toxemia, antenatal and intranatal hemorrhage and difficult deliveries. Regional anesthesia, saddle block or pudendal block are far safer.

Bartholomew and his associates have recently reported their observations in regard to the relationship between rupture of the marginal placental sinus and the onset of premature labor. They have found that the most frequent cause of premature labor is spontaneous rupture of the membranes. In their experience, the second most frequent cause has been rupture of the marginal sinus in a normally implanted placenta. Labor follows virtually all cases of ruptured membranes and over one-half the cases of ruptured marginal sinus. The report sums up their experience by stating that there is no logical means available to prevent either of these accidents or the ensuing labors.

Since the greatest hazard any baby has to face is prematurity; since all of the dangers and difficulties in converting from an intra-uterine vegetative existence to one highly active and requiring many adaptations, are increased so greatly by relatively minor im-

maturity; and since every effort to maintain the mother throughout her pregnancy in the highest degree of good health is a safeguard against this hazard, it is obligatory on everyone who cares for expectant mothers to be ever on his guard to detect and attempt to correct the first deviation from a state of normal health.

The increased and increasing birth rate, overcrowded and understaffed obstetrical hospital facilities, with increasing dangers, increasing hospital costs, increasing patient loads of doctors, all suggest a need for more and not less home deliveries, or, as a substitute, hospital or clinic deliveries with home postpartum care. Early ambulation fits in with such a program, as do home washing machines, diaper service, and compact homes with central heat and indoor plumbing. The disturbing incidence of resistant staphylococci infections brings to mind to many older obstetricians the constant warning of Joseph B. DeLee, that great obstetrical pioneer and teacher, against the unavoidable dangers of obstetrical delivery in general hospitals. Perhaps, the trend toward universal hospital delivery is going too far, too fast.

---

*Suppression of the Frequently-occurring Dermatoses by Short-term Therapy With a Modified Corticosteroid, Triamcinolone (Kenacort)*, by J. R. Allison and J. R. Allison, Jr. (Columbia) Monogr. on Therap. 3:99 (Oct. 1958)

Triamcinolone (Kenacort) a modified corticosteroid, was demonstrated to be an effective oral medication for the suppression of active episodes of the frequently occurring acute and chronic dermatoses in a series of 50 patients. A good to excellent response was achieved in 29 of 31 patients with acute dermatitis and 18 of 19 patients treated for acute flare-ups of chronic skin disorders. Even in chronic dermatoses, by employing short term therapy of this kind, and re-instituting medication to control subsequent relapses adverse reactions were largely avoided. As in all therapy with the corticosteroids, certain precautions must be undertaken, but it is felt that triamcinolone when administered judiciously is a valuable medication which can be employed with minimal hazard in dermatological practice.

J. Richard Allison, Jr., M. D.



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Rudimentary Right Ventricle

DALE GROOM, M. D.

*Case Record*—Autopsy examination of the heart of a 13 year old boy who died a few hours after cardiac surgery revealed the following unusual constellation of congenital defects, perhaps best summarized as "rudimentary right ventricle." Beneath a small but otherwise normal tricuspid valve was a tiny thick-walled right ventricular chamber of less than one-fifth average size. The pulmonary artery and conus were also small and the pulmonic valve appeared to be atretic though a minute orifice was demonstrable. There was moderate hypertrophy of the left ventricle, marked enlargement of the right atrium and its auricular appendage, and free communication between the right and left atria through a patent foramen ovale. A tiny slit-like perforation in the muscular portion of the interventricular septum barely admitted a probe. From an operation done eight years previously there remained a subclavian-pulmonary artery anastomosis of questionable patency.

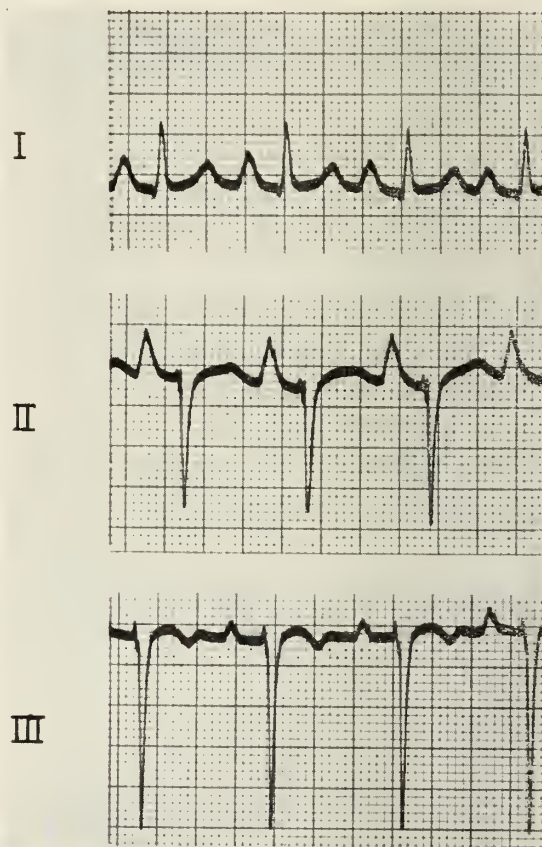
The child's clinical course had been characterized by progressive cyanosis since infancy, dyspnea, clubbing of the fingers and toes, a decreasing exercise tolerance, frequent attacks of syncope, and a mounting polycythemia with the hematocrit exceeding 80 vol. percent and hemoglobin 28 grams/100 ml. Some improvement had been maintained for several years following creation of the artificial ductus arteriosus but the disappearance of its continuous murmur and subsequent deepening of cyanosis had indicated loss of function of the shunt.

This electrocardiogram recorded at age 10 is representative of several made before and after his first operation.

*Electrocardiogram*—Both atrial and ventricular complexes are abnormal. The P waves of lead II are extremely tall and peaked—nearly 6 mm. in height—though they are not excessively wide. QRS deflections are almost entirely positive (upright) in lead I and negative in lead III, indicating left axis deviation which is distinctly abnormal at age 10. Their combined amplitude of more than 30 mm. in these leads and their width of 0.10 sec. suggests actual hypertrophy of the left ventricle.

The P-R interval of 0.22 sec. is slightly prolonged, particularly for a heart rate of 95 in a child, for whom 0.16 would be about the upper limit of normal.

*Discussion*—Early and accurate diagnosis of con-



genital cardiovascular anomalies is assuming new importance with the rapid development of surgical procedures for their correction. In this the electrocardiogram may be of great value, or of no value at all, or occasionally even misleading. More often it provides corroborative evidence for or against an anatomic diagnosis arrived at by other methods of examination.

Aside from dextrocardia in which the ECG might be considered pathognomonic, there are no electrical abnormalities specific for any congenital anomaly. The electrocardiogram makes its major contribution by reflecting which chamber of the heart is overloaded by the increased burden of work, as for example, the right ventricle in pulmonic stenosis or the left in coarctation or subaortic stenosis. It may also contribute to the diagnosis by disclosing abnormalities of conduction such as congenital right bundle branch block or atrial fibrillation, frequently associated with defects of the atrial septum, or the complete A-V block sometimes encountered in ventricular septal defects. Rarely it may provide the major

diagnostic evidence by displaying changes similar to those of myocardial ischemia or infarction in cases of congenital anomalies of the coronary arteries. Following cardiac surgery, serial electrocardiograms can be of considerable value in evaluating the net results on the heart.

There is an old maxim in cardiology to the effect that left axis deviation in a child with cyanosis bespeaks tricuspid atresia. This is perhaps more clinically useful than accurate, for now it is known that transposition of the great vessels, very large septal defects of the "single ventricle" type, fibroelastosis of the left side of the heart and other anomalies can produce the same combination of signs. The autopsy findings in this patient's case provide still another exception to the rule. In support of it, however, are the facts that left axis deviation is exceedingly rare in childhood, that most congenital cardiac anomalies impose their burden on the right ventricle, and that those which do lead directly to left ventricular hypertrophy, (e.g., subaortic stenosis, coarctation of the aorta, or, rarely, patent ductus arteriosus), all belong to the acyanotic group.

But any failure of development of the right ventricle, from whatever cause, could be expected to shift the axis of the ventricular potentials toward the left, whether left ventricular hypertrophy is present or not. Here the right ventricle was rudimentary and presumably non-functional because its outflow tract was occluded, producing the same net result as tricuspid atresia in which an imperforate valve prevents the inflow of blood. In both anomalies the flow is from right to left atrium through a patent foramen ovale or other defect in the septum. Hypertrophy of the right atrium is characteristic of such atrial septal defects and is typified in the tall peaked T waves which may reach huge proportions.

Congenital cardiac anomalies notoriously give rise to the most extreme degrees of hypertrophy, electrocardiographically as well as anatomically, probably because the abnormality of circulation is present from the outset and during the years of rapid growth. The myriad of gradations and combinations in which they occur demand the utmost in diagnostic resources for this approximately two percent of cardiac patients.

## PATHOLOGICAL CONFERENCE

(Abstract #896, Path. #59-16)

Dr. F. M. Ball, Conducting

Dr. M. P. Moore, Pathologist

**PRESENT ILLNESS:** At 9:00 P. M. January 7, a physician was called to the home of a 61 year old white man because of complaint of abdominal pain at 2:00 P. M. the patient was working at his usual job of supervisor at the airbase and ate a sandwich. Shortly thereafter, there was a feeling of fullness, upper abdominal discomfort and mild nausea. He



finished his day's work but symptoms became increasingly worse. The doctor found no definite physical findings; only complaint of vague abdominal pain. A dose of paregoric was given. At 12:00 P. M. the patient got up to vomit and fainted. The doctor called again and found the patient cyanotic, with moist clammy skin, a pulse of 40 and blood pressure of 80/0 mm. Hg. In the Trendelenberg position there was no change in blood pressure. The patient was given mephentermine sulfate (Wyamine) and was admitted to St. Francis Hospital at 1:00 A. M., January 8.

**PAST HISTORY:** The patient was known to be allergic to penicillin and was an alcoholic. His pulse was 56, blood pressure 138/80, temperature 97.6°. Aspects: Lethargic, with dyspnea and indication of abdominal pain. He was sweating and had slight cyanosis. There was sinus bradycardia, no murmurs, occasional premature ventricular contractions, no cardiomegaly.

**HOSPITAL COURSE:** On January 8 at 1:15 A. M. an electrocardiogram was made. The patient was given morphine sulphate, 1/6 grain and 0<sub>2</sub>. He vomited clear fluid after being given acenocoumarin (Sintrom). At 3:00 A. M. he was complaining of pain in the right upper quadrant of the abdomen and the right side of the chest. Blood pressure was 92/60. He was given Wyamine followed by a rise in blood pressure. He continued to receive morphine for pain. At 8:30 A. M. he vomited dark colored fluid. At 10:30 A. M. he had a mouthful of bright red streaked mucus. He was started on Na Heparin 100 mg. and 75 mg. t.i.d. For the rest of the day the patient had frequent abdominal pain. He was begun on chloramphenicol, prochlorperazine (Compazine) and fluids by vein. January 9 at 12:00 P. M. Surgical consult: generalized abdominal muscle guarding without rigidity, no masses, generalized tenderness, more marked in right lower quadrant. Very little peristalsis. The patient was dyspneic, cyanotic with generalized wheezes. Blood pressure 92/70. Wyamine was given. Temperature 102.8°. 2:00 A. M. blood pressure was 60/?. 1000 ml. 5% dextrose with one ampoule of Levophed (levarterenol) was given. Blood pressure rose to



120/80. At 6:45 A. M. the patient had "coffee-ground" vomitus. At 7:00 A. M. 1000 ml. 5% dextrose with Levophed was given but blood pressure fell to unobtainable levels. The patient had projectile vomiting of bile-like material followed by "coffee ground" liquid. Cedilanid (deslanocide) was given in the vein at 3:30 P. M. There was no demonstrable pulse or blood pressure. He was given 1000 ml. of 5% dextrose with 4 ampoules of Levophed. At 4:00 P. M. blood pressure was 130/? and temperature 105.6°. Dark brown material vomited. At 6:00 P. M. 1000 ml. 5% dextrose with 4 ampoules of Levophed were given. Temperature was 106.8°. At 7:30 P. M. 1000 ml. 5% dextrose with 4 ampoules of Levophed and erythromycin 500 mg. were given. At 9:30 P. M. there was no pulse, no blood pressure, respiration 30, temperature 106.4°F. Condition unchanged. He began having lapses in respiration, developing into Cheyne-Stokes, and respiration ceased at 1:40 A. M. January 10.

LAB. DATA: January 8, Hemog. 18 grams/100 ml. RBC 6.20 mil. cu. mm., WBC 18,600; 86% polymorphonuclears (15% N. F.) 14% Lymphocytes.

Urinalysis not obtained.

1:00 A. M. Serum transaminase 110.

1:00 A. M. Prothrombin 100%.

9:00 A. M. Clotting time (LW) 7 min.

9:00 A. M. Prothrombin 93%.

9:00 A. M. Serum transaminase—over 250.

3:00 P. M. Clotting time (LW) 9 mins.

Serum amylase—64 units.

January 9

9:00 A. M. Clotting time (LW)—16 mins.

Dr. Ball: Mr. LaBorde, Will you give us your interpretation of what happened in this case?

Mr. LaBorde: The outstanding symptom in this case is abdominal pain. There is a state of shock with a fall in blood pressure. These changes fit a heart attack and I think this patient has had a coronary thrombosis, but I do not believe that this is his only disease. After his hospital admission his physical signs cleared up but the abdominal symptoms continued. I think the abdominal picture is separate from the cardiac one. It is noted that he had hematemesis and the causes of this would have to be considered. The first is that he may have a peptic ulcer possibly precipitated by his coronary thrombosis. Secondly, it may be the result of mesenteric thrombosis. In fact, I think this latter is a good possibility, since his abdominal pain was the chief symptom. Other possibilities would include an aneurysm of the aorta, especially a dissecting aneurysm. One must also think of acute pancreatitis. However, there is no left upper quadrant pain and the amylase determination is not very high. The latter may not be of too much importance since the maximum elevation of amylase frequently does not occur until 48 or 72 hours after the attack has passed. Pulmonary embolism should also be considered, but, if this had

occurred, I think the lung findings should have been more pronounced. There is the possibility, of course, that this patient could have had thromboses in more than one place. The erythrocyte count is elevated, even after the patient had been given fluids, and this makes one think of polycythemia. In this condition one also could have a coronary and mesenteric thrombosis.

Dr. Ball: In your statement about abdominal pain did you say that you thought the patient had a mesenteric thrombosis?

Mr. LaBorde: It is a safe assumption that he had a myocardial infarction and I think the mesenteric occlusion is more likely due to thrombosis than embolism from a mural thrombus within the heart.

Dr. Ball: Your first diagnosis is myocardial infarction and second, mesenteric thrombosis. Are there any other acute abdominal conditions that could cause his symptoms and signs?

Mr. LaBorde: I thought of the possibility of hepatic coma. Changes in the liver might have caused these findings. In view of the alcoholic history, cirrhosis is a possibility but if this condition is present I would think that the prothrombin time would be decreased and that there would be more tachycardia.

Dr. Ball: Do you think that this patient could have had appendicitis? Why was he not operated upon?

Mr. LaBorde: It is possible that the patient could have had appendicitis but, since he was not operated upon, I did not consider it too seriously. He was, however, a very sick man.

Dr. Ball: When did the intestinal infarction occur, at work or when he fainted?

Mr. LaBorde: I think the coronary occlusion occurred when the patient ate his sandwich at work but I think the mesenteric occlusion occurred later when he vomited and fainted.

Dr. Ball: What about the transaminase levels?

Mr. LaBorde: These are high and would make you think that the infarction occurred earlier.

Dr. Ball: Does mesenteric embolization fit with the diagnosis of myocardial infarction?

Mr. LaBorde: It is much more likely that the condition was thrombosis rather than embolism because, although I think he had his myocardial infarct first, mural thrombosis as a site from which embolization might occur takes at least 48 hours to develop and the patient did not live this long.

Dr. Ball: Let's take a look at the ECG. You see that the T waves are inverted in leads II and III. There is ST depression in the V leads and there is a variation in the PR interval as well as a prolongation of this interval. These changes confirm the diagnosis of a posterior myocardial infarct.

Dr. Ball: Thank you, Mr. LaBorde. Student Pennell, what do you think of the possibility of appendicitis in this case?

Mr. Pennell: I think it is a possibility since the patient showed muscle guarding and complained of right lower quadrant pain. However, I think the



abdominal symptoms and signs would have been more progressive if this were the situation, particularly if appendicitis was responsible for the severe shock.

Dr. Ball: Does the alcoholic history in this case appear to be of particular significance?

Mr. Pennell: With this history one would think more of acute pancreatitis and the possibility of peptic ulcer as a cause for his abdominal pain. However, again, I think if these conditions were present there would have been more of a progression of his abdominal symptoms. I am not so much in favor of pancreatitis because the amylase peak may be reached in 12 to 24 hours and his level is not very high. His red count and hemoglobin are increased but this could be on the basis of hemoconcentration, secondary to vomiting. Was the patient sick at all before the time given in the protocol?

Dr. Ball: The patient had no symptoms of illness before 2:00 P. M. of the day of admission.

Mr. Pennell: He may have had a small occlusion previous to this, a sort of "silent coronary". This may have progressed to give him his symptoms and signs at the time they appeared.

Dr. Ball: Thank you very much. Would any of the staff like to discuss the case?

Dr. John Buse: This has been a nicely discussed case and one typical of a myocardial infarction. I do not think the patient had a perforation of any viscus but I do think that he had infarction of his bowel before he had the coronary occlusion.

Dr. Kelley McKee: The abdominal complaints were major and certainly may have been first with coronary occlusion and myocardial infarction later.

Dr. Ball: At the time, I thought he had his coronary thrombosis when he fainted. I was very concerned over the abdominal pain being possibly due to appendicitis and consultation with a surgeon was secured. He agreed with my diagnosis but, in view of his heart condition, could not operate and therefore this is the reason the patient was given large doses of antibiotics. Now we will hear what the pathologist has to say.

Dr. Moore: The case today has been nicely discussed and it is one of both coronary thrombosis and myocardial infarction as well as mesenteric thrombosis and infarction of the bowel. From the pathological standpoint, I am afraid it is going to be impossible to say which came first. However, for the sake of discussion let's assume that the coronary thrombosis and myocardial infarction did occur first and, since prognosis in acute myocardial infarction depends on the size of the infarcted area as well as by whether or not certain complications develop, we would like to discuss the case from this standpoint.

About 80% of patients recover from their first myocardial infarction and 50% of these return to a gainful occupation. In fact one set of statistics points out that from the time a patient first has angina or

myocardial infarction there is a remaining life span of eight to ten years before death.

The principal complications of myocardial infarction are shock, congestive heart failure, abnormalities in rhythm, thromboembolism, rupture of the ventricle, perforation of the interventricular septum and rupture of the papillary muscles. Of these, two were present in the case under discussion today.

The first of these is shock. This occurs in from 15 to 50% of patients with myocardial infarction. When it occurs the mortality is 75% to 90% of cases compared to a death rate due to all causes in myocardial infarction of only 20% to 25%.

The second complication present was thrombosis and these phenomena complicate convalescence in 35% of cases of myocardial infarction. They may occur within the heart by an extension of the original clot and an increase in the amount of infarction, by a new occlusion in a separate vessel with a separate infarct or by the development of mural thrombi which occurs in 50% of necropsy cases. It is of value to note here I think that these mural thrombi in the heart are almost always in the left ventricle.

Extra-cardiac embolic phenomena are due to increased coagulability of the blood, decrease in blood pressure and the decreased velocity of blood flow. The usual location for such phenomena are the lungs, kidneys, aorta, brain, spleen, liver and adrenal glands.

In the case under discussion there was an acute thrombus in the midportion of the circumflex branch of the left coronary artery with infarction of almost the entire posterior wall of the left ventricle. This was characterized by the ventricular wall being soft to palpation and, upon section, quite distinctly yellow due, as you know, to leukocytic infiltration into the necrotic area. This would indicate that the infarction was at least of 12 to 24 hours duration. The superior mesenteric artery showed a large plaque at its origin and its lumen was completely filled by an acute thrombus. The result of this was reddening and discoloration of the distal two thirds of the small intestine and the proximal one-half of the large intestine. Upon opening the intestine the wall was quite red and its lumen contained a moderate amount of blood.

In addition there was a wedge shaped infarct of the spleen and kidney. No specific thrombi could be identified in these regions because undoubtedly the vessels involved were comparatively small.

Another area of thrombosis involved a medium sized artery of the brain in the region of the cortex of the left parietal lobe. The result of this was a 4 x 3 cm. area of hemorrhagic necrotic cerebral tissue.

(Slides of the heart, spleen, kidney and brain are shown to illustrate the changes described.)

In summary, then, we have presented a case of coronary thrombosis with myocardial infarction and

the development of shock as well as multiple thromboses and infarction in other organs. As we started out by saying, it is perfectly possible that the mesenteric thrombosis with the infarction of the bowel could have been the initiating factor for this

series of events but we cannot be certain of this pathologically. In either case, the development of shock with thromboses in the other viscera could have followed and the resulting picture would be the same.

## VERITAS

The daily pursuit of scientific research has much in common with the wearing of bifocal glasses. The purpose in each case is to learn as much as possible about some aspect of the world surrounding us, to get the most accurate and precise set of ideas which can be obtained. These are beautiful objectives and easily stated. The pursuit of the objectives, however, goes rather jerkily by a process of getting an idea and keeping it until some set of experiences proves that it is wrong. One jumps at a conclusion and hangs on until he is shaken off, something like catching a ride on the back end of a fast-moving delivery truck.

Those who have taken up the study of the world through bifocal glasses are entirely familiar with this set of processes. Everyone has had the experience of looking for the salt at table; it's not within the view of the lower lens, or the upper lens; the scientific mystery lies just beyond that part of the lens system through which you can't see anything. Many have had the experience of pushing a cuff of the best Sunday suit into the soup, while graciously passing something to the guest of honor. A few may even admit to having buttered their vanilla ice-cream with mustard; although this takes a bit of absentmindedness, in addition to plain bifocal difficulty.

However, the most esoteric forms of misinterpretation of the obvious can only be carried out in a serious institution of higher learning which directs its full powers to research and teaching, such as a department of anatomy in a medical school. The other day I was helping give the final examinations on the structure of the human arm to a group of freshman medical students. Each brought the arm of the human cadaver which he had dissected along with him, to demonstrate to me that he had separated each and every part from the others, and could identify each part, and knew where these parts are to be found when, as a surgeon, he works on the whole living arm. This kind of examination is emotionally disturbing under the best of circumstances; it is not comforting to have somebody else's partially dissected arm under your care or within your field of vision. Students, not quite ready for the examination, tend to be worried and a little frightened. After all, everybody knows the Professor is a fiend.

I began the examination rather gently, slowly asking a few simple questions. I had a pretty good student, too. But as the questioning went on and became a little more difficult, I noticed his hair raising slowly,

his face flush, and his pupils dilate a bit, all evidences of progressively intense fear. I looked through the top of my bifocals and saw the tips of his ears redden and his pupils dilate a little more. (This lad obviously needs a little reassurance.) I asked him to show me one of the deeper structures of the forearm, the volar interosseous nerve (easily found), at which he blanched sharply. I took the hand of his specimen in mine and turned it so as to make it easy for him to demonstrate the requested structure. To my surprise, he had not dissected that far. In fact, he had not even begun his dissection, in any manner whatsoever! Time to teach these boys a lesson! So, selecting a scalpel and a few retractors, I made a midline incision down the volar surface of the forearm, laid back the skin, slit through the superficial fascia, opened the deep fascia, and laid back the adjacent muscles—a truly magnificent dissection. A few quick moves with the probes, and the nerves, muscles, and larger blood vessels were all opened to detailed observation. A half-dozen students had come up to see the Master at work. There was a hushed silence. I looked around the group, each was intently interested. They watched, fascinated, all with pupils dilated. As I began the description of the structures visible through the lower portion of my bifocals, I noticed an accumulation of blood in the deeper parts of the dissection. (Most unusual in a cadaver!) I mopped it a few times but the bleeding continued. I looked up at the student's face, which was now turning fairly white, and suddenly realized that this expertly done demonstration-dissection had been carried out on the living forearm of one of our best future surgeons. Well, the chief of the surgery department came over, stitched up the dissection and saved the student's life, prescribing a pint of penicillin and two ounces of antitetanus serum to be taken in a quart of Guinness Stout, hourly.

That just goes to show you what bifocals and misdirected attention can lead a properly absent-minded professor into.

Truth, of course, can only be obtained by the acquisition of satisfactory ideas which are discarded when proved wrong. A happier experience in the research laboratory provides further illustration.

We were doing investigations to determine exactly how severe thermal burns and scalds damage the human body. The experiments were being carried out under the combined auspices of the military branches

of our Government. As you know, the Military take great pride in their ability to broil or bake an anesthetized young man concealed within a concrete pillbox or a gun turret on a tank or battleship. Their best efforts are carried out on youths who speak only foreign languages whose cries of pain and despair need never be listened to. We, as medical investigators, must find out exactly how burning human tissues (whether blazing, or smoldering like a forgotten roast), alter the normal healthy physiology of the individual in such a way as to initiate his screams, or stop his heartbeat, or wither his arms. Of course, being humanitarians, our investigations are carried out on anesthetized mice. We were at something of a dead-end in our studies because whether the anesthetized mice were burned with a blow torch or dipped in boiling water, they never uttered screams which could be translated satisfactorily by any of our language specialists.

Unfortunately, about this time the Society for the Prevention of Cruelty to Animals discovered the nature of our investigations and by an official letter demanded that their chief warhorse, a spinster of formidable aspect, be permitted to visit the laboratory and put an end to our diabolical tests. There was no way to keep her from coming here. And, to make it worse, the commanding general, under whom we worked, telephoned, stating he would be here to find out why the translated sounds from the mice were unintelligible, and would arrive on the same day.

The personnel of the laboratory divided into two teams; my first assistant, a business-like young lady, and I chose members as small boys choose up sides for a ball game. By lot, my assistant was delegated to show the general through the laboratory while I would have to entertain the dominant character of the Society for the Prevention of Cruelty to Animals in our reception room.

Satisfying the general that we were carrying out our investigations properly was a simple matter; at the first touch of red-hot iron to fur, at the first smell of burning flesh, the general fainted dead away. Several of the animal caretakers took him over, and revived him slowly by waving under his nose a beaker

of diluted gin. It seems that in his whole 40 years with the military, he had never previously smelled burning flesh; during two world wars he had never smelled anything worse than burning gunpowder.

How to dispose of my own guest in a thoroughly courteous manner? I sat facing her, smiling as broadly as the circumstances permitted, rapidly selecting soothing phrases to be presented with politesse. To my horror, through the doorway behind the militant spinster came my first assistant; and as she walked, she rhythmically dipped an anesthetized white mouse in a beaker of scalding water. I froze solid, in pure funk. Our guest turned, and my assistant politely asked, "Tea? Would you like a cup of tea?" and the lower half of my bifocals showed a tea bag on a thin white tail, rhythmically rising and falling in the proffered beaker.

There is nothing of course to bring the geniality out of a harridan like a well-brewed beaker of strong tea. We soon were getting along quite amicably. She assured me that although there had been rumors, she and the other officers of the Society for the Prevention of Cruelty to Animals were truly aware that no such famous medical center as this, nor such a handsome scientist as I, could possibly carry out the brutalities which haunt the nightmares of their members. She asked deprecatingly about the prevailing odor of burned flesh which was choking us. I assured her that it came from a pair of burned twin girls, four-year olds, just brought in by the fire department. Thus calmed, she gaily prepared to take her leave, and I, in a spirit of uncontrollable gallantry, personally conducted the old buzzard to the elevator.

As the doors closed on her, I took sincere personal satisfaction in the knowledge that at that moment her gizzard was cheerfully warmed by the juices of an anesthetized mouse, rhythmically dipped in boiling water.

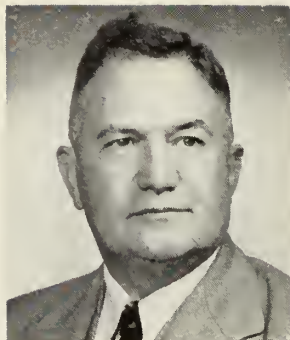
With bifocals and science, you jump at your conclusion and hold it 'til proved wrong.

Sic semper veritas.

Signed,  
Quidnunc







## PRESIDENT'S PAGE

**TIMES DO CHANGE:** In the days of yore, when King Arthur's Knights wore the armor that marked such distinction unto the social elite and frequently the recognition of bravery as Sir Galahad in Tennyson's poem. Comfort has advanced tremendously as those old buggers would have to be helped by one or more valets into their metal encasement. Then a step ladder with several able bodied helpers would be necessary to assist in mounting his steed. If one's gallantry had not changed a Knight could have mounted a present day polo pony and socked the daylights out of Sir Knight with the polo stick.

What has this to do with our present day civilization; well, it's just a comparison, as an active Knight must have been in his late teens or twenties to be successful. Nowadays, a man is 21 to 24 when he completes college. If he chooses a graduate course or profession, he has three to four additional years. My gosh!, that will put him at 28 to 30 years of age before he can start practicing if he wishes to specialize. The M. D.'s have lost six to eight years of gainful occupation, where the businessman, whether he be banker, accountant, insurance or real estate, should have his feet well on the ground. Now the physician has to work day and night to get himself established and make ends meet. The charges he makes are small in comparison to the businesses. Mr. T. V. or Radio man charges \$5.00 to come to your house to tell you what a job would cost and sends you a bill for \$99.94 after keeping you waiting for two and one half weeks.

Yes, there is a justification for the physician and his reasonable fee. He is trying to save lives, not merely tinkering with metal on wooden boxes. The doctor's ideals are high in almost every case as he has been trained in academic and scientific ways to appreciate the best things in life and he wants the same for his patients.

He has been fortunate in even being chosen to enter medical school and no one works harder or longer than the medical student in the first two years, after which it is an application of the didactic or theoretical student to the practical.

We of the medical profession wish your cooperation and understanding. When you are not satisfied or feel that you have been neglected or unjustly treated, there is always an appeal. Each county medical society has a grievance committee to which you can appeal and I believe you will get just returns.

The doctors business is the treatment of disease, care for the sick, care of the aged and disabled and we desire that our services will be the best possible.

William Weston, Jr., M. D.

# Editorials

---

## THE 1959 MEETING

The 111th Annual Session of the Association came to a close on May 14 after a most successful performance. Columbia displayed its best hospitality, the hotel managements were most cordial, and service appeared to be good everywhere. The attendance was very satisfactory having been in the approximate region of something a little under 600 physicians, with a large number of members and their families and the usual quota of commercial exhibitors.

Preliminary committee meetings on May 11 were followed by a meeting of Council on May 12 and the gathering of the House of Delegates in the afternoon of the same day. The business of the Association was conducted in a competent manner, and no particularly controversial subjects were debated. Resolutions and requests from the various standing committees of the Association were considered by Reference Committees in the evening, and reports were heard and acted upon on the morning of May 13. Among these was a report from The Blue Cross-Blue Shield organization with some encouraging promise of coming development of a low-cost type of insurance for people over 65 to provide medical and surgical benefits. Mr. Sandow noted that there had not lately been any great increase in the number of people covered by the plans, but that every effort was being made to extend the benefits. The delegates approved this endeavor wholeheartedly and, the following were nominated to the Board of the Plan: Mr. Frank S. Adams, Mr. Wilton F. May, Mr. M. L. Meadors, Dr. J. A. Siegling, Dr. W. W. King to succeed themselves, and Mr. Dill Ellis of Dillon and Dr. W. West Simmons of Greenville were added.

The House discussed the question of a permanent home and an early removal of the offices of the Association to Columbia, but

decided to make no change at the present and to continue the Committee for further study of the situation. The program of Public Relations was encouraged and some money set aside for its continuation. The Committee on Social Security for Doctors gave an interesting report which appeared to show that there is a greatly increasing interest in having Social Security, but that the actual vote had resulted in a negative report, that is to say, the majority did not wish to see the medical profession involved in the Social Security scheme.

Biennial registration of physicians with the State Board of Medical Examiners was approved in principle, and the Committee was authorized to continue its study and present new reports at the next meeting. The Committee thought that no basic science law should be pushed at this time. The Committee on Civil Defense was discontinued pending rearrangements in the general set up of Civil Defense in the state. Discussion of whether or not Federal funds should be utilized by our state institutions, especially the State Board of Health, resulted in a vote which indicated that the general feeling was that they were of great value and that it would be almost impossible to make any readjustment at the present time. The vote was 33 for and 23 against this measure.

A committee was created to study the matter of setting up a Benevolent Fund for destitute physicians or their families, a Fund to be patterned somewhat along the lines of those followed in other states as state-wide activities and on the local activities of "The Widows and Orphans" Society which has functioned in Charleston for many years. It was decided to set up a Review and Adjudication Committee for the Blue Cross-Blue Shield Plans which would function in judging the propriety of disputed claims. Further study was indicated before any specific plan was undertaken.

A number of other matters were discussed and may be found in the complete minutes which will appear in this *Journal* before long.

The Scientific Program was well done and well attended. Most of the material presented will appear over a period of time in this *Journal*.

The social events of the meeting were most enjoyable. There were a number of private small entertainments, and the exhibitors were as usual hospitable. The Alumni Luncheon at the Jefferson Hotel was rather unusually well attended and was distinguished by a pictorial and vocal sketch of the life of Dr. Kenneth Lynch. At the end of the recital, Dr. Lynch was presented with a handsome silver pitcher in appreciation of his many long and valuable years of service to the College and to medical education in the state. The Alumni Association also furnished entertainment on Wednesday night, and a crowded hall was regaled with a "Floor Show" and miscellaneous entertainment. The annual banquet and ball on Thursday evening were also very well attended, and following the excellent performance of a skit by the Greenville Auxiliary, the members present had the privilege of hearing a very excellent speech by Dr. Gunnar Gundersen, the President of The American Medical Association. All told, this was an excellent meeting, and it is to be hoped that the next one, to be held at Myrtle Beach, will prove as large and as pleasant and as worthwhile scientifically.

---

JOSEPH P. CAIN, JR., M. D.,  
*PRESIDENT-ELECT*

Named at the recent meeting of the Association in Columbia as President-Elect for the coming year, Dr. Joseph P. Cain of Mullins, has a full and active background of work and interest in the organization. Dr. Cain has served most ably as chairman of the Council of the Association for a number of years past. He has also been vitally interested in the Alumni Association of The Medical College and has done much to promote interest in post graduate education for the alumni. He was secretary and treasurer of that Association for eight years, and now serves on its Finance Committee. He has



JOSEPH P. CAIN, JR., M. D.

also been much interested in the development of the branch of the University of South Carolina at Florence, and has given much time to civic work of many kinds, serving on his Town Council and interesting himself in many local activities.

Dr. Cain was born in Greenville, South Carolina, August 6, 1912 and achieved the B. S. degree at the University of South Carolina in 1931 and the Degree of Doctor of Medicine at The Medical College of South Carolina in 1935. He served an internship at St. Francis Infirmary in Charleston, and at Lynn Hospital at Lynn, Massachusetts. He did residency activities in The Mission Hospital in Asheville and the Mullins Hospital. He has taken post-graduate courses at George Washington University and at The Medical College of South Carolina.

In practice in medicine and surgery in Mullins since 1937, he has been Chief of Staff at the Mullins Hospital, and on the Consultant Staff at the Marion Memorial Hospital and the St. Eugene Hospital at Dillon. His medical activities have been very numerous and



he has held positions in several organizations, such as President of The Marion County Medical Society and of the Pee Dee Medical Association, whose *Bulletin* he edited from 1948 to 1958. He has been a member of the Council of The South Carolina Medical Association since 1949 until now. He is a member of the Editorial Board of *The Journal of the South Carolina Medical Association*, a member of the Committee on Industrial Health of The American Medical Association, and a member of the Southeastern Surgical Congress. His interest in matters of insurance are indicated by his position as a Director of The South Carolina Medical Care Plan. He is a Surgical Consultant to the South Carolina Division of Vocational Rehabilitation, and has received a Congressional citation for work as examining physician with the Marion County Local Board #1 in World War II. Recently an opportunity for expansion of his interest in educational matters has been made by his appointment as a Trustee of The Medical College of South Carolina. Only a few weeks ago a biography of Dr. Cain appeared in The Florence Morning News in which he was cited as the "Pee Dee Man of The Week."

Dr. Cain's thorough knowledge of the affairs of the Association and his energy and enthusiasm will combine to make him a most desirable President from whom much may be expected.

---

### THE NEW OFFICERS

Dr. Joseph P. Cain, Jr. a well-known general surgeon from Mullins, was elected unanimously to the post of President-Elect of the South Carolina Medical Association.

His selection by physician-delegates meeting at the Columbia Hotel at Columbia means that Dr. Cain will become president of the Association at the 1960 meeting.

Dr. William Weston, Jr. of Columbia, this year's President-Elect took over the Associa-

tion's reins May 14 from Dr. R. L. Crawford of Lancaster.

The Association picked Myrtle Beach as the site for its 1960 sessions and filled 13 other positions on the Association and state boards.

Dr. Clay Evatt of Charleston was named vice president of the Association, succeeding Dr. Henry C. Robertson, Jr., also of Charleston.

Dr. Robert Wilson of Charleston was re-elected secretary of the Association, and Dr. J. Howard Stokes of Florence was re-elected treasurer.

The new President-elect, Dr. Cain, is a native of Greenville and has been practicing general surgery at Mullins since 1936.

In other elections, the Association chose their new president, Dr. William Weston, Jr., of Columbia to succeed himself as delegate to the American Medical Association. Dr. Frank C. Owens of Columbia was chosen alternate delegate to succeed Dr. Robert Wilson of Charleston.

Three district Councilors named to three-year terms were: Dr. C. J. Seurry of Greenwood, Third District (re-elected); Dr. William Perry of Chesterfield, Sixth District (succeeding Dr. Cain); Dr. John M. Fleming of Spartanburg, Ninth district (re-elected).

Three members of the Mediation Committee named to three-year terms were: Dr. Martin M. Teague of Laurens, Third District (re-elected); Dr. Sam Cantey of Marion, Sixth District (succeeding Dr. Walter R. Mead); Dr. Harold P. Hope of Union, Ninth District (re-elected).

Two members of the Board of Medical Examiners were re-elected to four-year terms. They are: Dr. Kirby D. Shealy of Columbia, Second District; Dr. Rodrick Macdonald of Rock Hill, Fifth District.

Dr. Tucker Weston of Columbia was elected to fill a vacancy on the Association's Hospital Advisory Committee.



# REPORT OF MEMORIAL COMMITTEE SOUTH CAROLINA MEDICAL ASSOCIATION 1958-1959

This morning we gather to do honor to those of our colleagues who have answered their last earthly call since last we met (or who have not previously been recognized before this group).

Milton referred to death as "the golden key that opens the palace of eternity", and I am sure that we will agree with him. The following doctors, past members of the South Carolina Medical Association, have turned that key and we honor them at this time.

DRAYTON D. KINARD	Spartanburg	Feb. 21, 1957
WILLIAM P. TURNER	Greenwood	Apr. 2, 1957
WILLIAM H. LYDAY	Greenville	May 3, 1957
A. T. HUTTO	Pelion	May 10, 1957
ROBERT JONITZ	Greenville	June 19, 1957
FRANK M. DANIELS	Greenville	June 27, 1957
CHILDS C. HORTON	Pendleton	June 27, 1957
FRANK B. C. GEIBEL	Columbia	Aug. 24, 1957
ROY P. FINNEY	Spartanburg	Sept. -, 1957
PAUL F. THOMPSON	Anderson	Sept. 3, 1957
CHARLES P. ROPER	York	Sept. 6, 1957
JEFF W. WEBB	Seneca	Jan. 12, 1958
FRANCIS B. JOHNSON	Charleston	Jan. 16, 1958
FRANCIS H. BOLD	Charleston	Jan. 25, 1958
YEADON M. HYER	Darlington	Jan. 29, 1958
RICHARD B. FURMAN	Sumter	Feb. 21, 1958
JAMES B. LATIMER	Anderson	Apr. 1, 1958
WILLIAM B. McWHORTER	Anderson	Apr. 15, 1958
CLARENDON B. WOODS	Walterboro	Apr. 23, 1958
ROBERT L. RALSTON	Spartanburg	Apr. 26, 1958
WILLIAM T. PACE	Gray Court	July 6, 1958
HUGER T. HALL	Aiken	July 25, 1958
ASA P. TRAYWICK	Cameron	July 26, 1958
HARRY H. WYMAN, II	Aiken	July 30, 1958
LAWRENCE L. RICHARDSON	Simpsonville	Aug. 9, 1958
C. H. HAYNESWORTH	Greenville	Aug. 15, 1958
THEODORE QUATTLEBAUM		Aug. 24, 1958
GORDON R. WESTROPE	Columbia	Aug. 25, 1958
JOSEPH W. McMEANS	Anderson	Sept. 2, 1958
WILLIAM H. CHAPMAN	Whitney	Sept. 24, 1958
HARRY F. WILSON	Columbia	Oct. 23, 1958
FRANK L. MARTIN	Mullins	Nov. 9, 1958
HAL B. HOLMES	Conway	Dec. 27, 1958
WILLIAM H. MOORER	Lodge	Jan. 5, 1959
J. McIVER WILLCOX	Darlington	Jan. 7, 1959
STUART B. SHERARD	Gaffney	Feb. 1, 1959
ORION T. FINKLEA	Florence	Feb. 7, 1959
WILLIAM M. CARPENTER	Greenville	Feb. 8, 1959
JAMES L. SAMPLE	Hampton	Mar. 3, 1959
EDDIE H. THOMASON	Olanta	Mar. 29, 1959

As we pause to honor these men I would not attempt a eulogy, but rather I will ask you to join me in spirit as I bring you the words of St. Francis of Assisi.

"Lord, make me an instrument of thy peace. Where there is hatred let me sow love; where there is injury, pardon; where there is doubt, faith; where there is despair, hope; where there is darkness, light; where there is sadness, joy.

"O divine Master, grant that I may not so much seek to be consoled as to console; to be understood as to understand; to be loved as to love; for it is in giving that we receive, it is in pardoning that we are pardoned, and it is in dying that we are born to eternal life. Amen".

Submitted by the Memorial Committee

Thomas Goldsmith  
Howard Stokes  
Martin Teague, Chairman

## MINUTES OF COUNCIL MEETING

Columbia, S. C. February 25, 1959

A special meeting of Council was held at the Columbia Hotel on February 25, 1959. The meeting was called to order at 3 p. m. by the Chairman, Dr. J. P. Cain. Members present were Drs. Crawford, Weston, Wilson, Stokes, Waring, Robertson, B. Smith, Burnside, Fleming, Gressette, Bozard, Brewer and Mr. M. L. Meadors.

The minutes of the meeting of November 19, 1958 were read but were not approved because of the objection of Dr. William Weston, Jr.; Dr. Weston requested that his reasons for opposing the motion that Council continue the support of the South Carolina Medical Association opposing the proposed legislative bill regarding the practice of optometry, be included in the minutes. However, as the minutes of this meeting had already been published in the Journal, Dr. Weston stated that his reasons for opposing this action was the practice of certain ophthalmologists in having opticians in their offices for the fitting of glasses for their patients, a practice which he stated had been disapproved by the American Medical Association.

Attention was called to the fact that Chapter I, Section 8 of the 1955 edition of the "Principles of Medical Ethics of the American Medical Association" with reference to the dispensing of lenses by ophthalmologists, read as follows:

"It is not unethical for a physician to prescribe or supply drugs, remedies or appliances as long as there is no exploitation of the patient."

This has been superseded in June 1957 by the adoption of a further statement of the Principles, which reads as follows:

"In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs remedies or appliances may be dispensed or supplied by the physician provided it is in the best interest of the patient."

Dr. Weston further stated that he would continue this opposition until the ophthalmologists set their own houses in order by discontinuing this practice.

The Chairman, with the concurrence of Council, ruled that further minutes not be published in the Journal until they had been approved at a subsequent meeting.

The report of the Special Committee on Public Relations was then presented, with the following recommendations.

"1. That some member of the Association conversant with its activities be designated to act as the head of the public relations activity, and that he should be paid a salary of \$1,200.00 per year. The name of Dr. J. I. Waring was suggested for this

position, as he as Editor of *The Journal* was in a place in which correlation of the two activities could be accomplished fairly easily.

"2. Employment of one of the Public Relations firms mentioned on a tentative basis. It was suggested that each one be given a six-months trial period, but this seemed to be rather clumsy an arrangement, and the question of employment specifically was not settled. It was felt that the sum of \$1,800.00 to \$2,000.00 would be as much as the Association could afford to pay such a firm.

"3. It was thought that the manner in which the firm would function would be in publicizing the annual meeting, and in following this meeting up with various accounts,, and in particular with special feature articles which might indicate what the recommendations and activities of the various committees of the Association were, and what their effort is to better the health of the people of the state. It was thought that the member of the Association could have close contact with the lay-firm, could suggest subjects, furnish material, and check the finished material, which would be prepared in proper form for publication in the newspapers or elsewhere by the public relations firm. The activity of the firm would not be limited to this field, but it would presumably be applied to making public any matters which concern the Association and the general public as they came up from time to time. There would be no effort of having any sort of lobby, and particular care would have to be exercised in not attempting to answer too indignantly some of the half-baked statements which appear from time to time in the press. However, that would be a matter for consultation between the representative of the Association and the firm employed."

After a general and prolonged discussion in which all members of Council participated, the following actions were taken:

A. That the Public Relations Program sponsored by the South Carolina Medical Association be expanded for the next year, including closer cooperation with County Public Relations and Publicity Programs, and endeavoring to assure better publicity for the work of the State Medical Association and its committees.

B. That Dr. J. I. Waring be appointed Director of this Program, with full power to act to secure its success.

C. That no professional Public Relations Firm be employed on a retainer basis.

D. That compensation to Dr. Waring for this additional duty be made on the basis of \$100.00 per month in addition to all expenses.

Dr. R. L. Crawford read a letter from the South Carolina Association of School Boards regarding doctors serving in this capacity over the state; this was received as information.

The proposed fee schedule for industrial compensation was then brought to the attention of



Council and on a motion of Dr. Crawford adoption was postponed and it was recommended that reconsideration of the schedule be referred to the House of Delegates.

At the request of Dr. William Weston, Jr., the Secretary reported that a suggestion had been received from Dr. W. A. Smith recommending action by the State Medical Association to secure help for indigent members of the medical profession and their families. This was received as information.

The Secretary read letters from Dr. Alan B. Warren, President of the Spartanburg County Medical Society and Dr. George R. Wilkinson, Chairman of the State Board of Medical Examiners, regarding itinerant practice of medicine, which was illegal in South Carolina. This matter was likewise received as information.

Dr. J. H. Stokes spoke of the use of funds of State Cancer Society, noting that physicians were not remunerated for their services in this work.

It was called to the attention of Council that at hearings before the State Board of Medical Examiners physicians accused of illegal practices were usually represented by their attorneys; Council gave permission and recommended that Mr. M. L. Meadors be present at such hearings when possible.

Dr. Gressette called to the attention of Council the proposed legislative bill regarding the requirement for labeling of blood according to the race of donor; this was received as information and no action taken.

Council then adjourned at 6:30 p. m.

Respectfully submitted,

Robert Wilson, M. D., Secretary

---

## NEWS

---

### MEDICAL COLLEGE PROMOTIONS, APPOINTMENTS ARE ANNOUNCED

Three appointments and six promotions were announced May 14 following the regular meeting of the Medical College of South Carolina Board of Trustees in the offices of Gov. Ernest F. Hollings.

Dr. John T. Cuttino of Charleston, present dean of the School of Medicine, was made executive vice-president of the Medical College for the year 1959-60; Dr. Vince Moseley of Charleston, professor of medicine, was appointed associate dean of clinical medicine; and Dr. Albert Cannon, now assistant professor of pathology at Georgetown University, Washington, D. C., was appointed assistant professor of clinical pathology.

Dr. Cannon is a native of Charleston and holds degrees from the College of Charleston and the Medical College. He will assume his new post on July 1.

The following faculty members were promoted: Dr. Leon Banov, Jr., to assistant professor of surgery; Dr. C. Capers Smith to assistant professor of neurology; Dr. John F. Buse to assistant professor of medicine; Dr. L. B. Jenkins to assistant professor of surgery; Dr. Eugene F. Woods to assistant professor of pharmacology, and Dr. John M. Mahaffey to assistant professor of anaesthesiology.

The Journal has received an urgent request from people in Olanta who are desirous of filling the vacancy in medical practice created by the death of Dr. E. H. Thomason, who was highly esteemed and well beloved in the community. Mr. J. Fred Rush of Olanta considers that there is an ideal opening for a physician, and requests that anyone interested get in touch with him.

---

### CHARLESTON COUNTY TO HONOR DR. LEON BANOV

The Charleston County Health Center planned near Pinehaven Hospital, will be dedicated to Dr. Leon Banov, county health officer.

Council is taking this step to recognize the accomplishments and unselfish devotion of Dr. Banov in his many years as the county health officer.

A large bronze plaque in the center detailing some of the history of the doctor's association with the Health Department is planned, Graham said.

Among those expressing approval of the decision were the Charleston County Business and Professional Women Association; the Charleston County Board of Health, headed by Dr. W. Clay Evatt; Dr. T. Hutson Martin, chairman of the County Health Clinic, and others, Graham noted.

A native of Poland, Dr. Banov has been associated with the Health Department for 47 years. Born July 5, 1888, he came to Charleston at an early age and operated a drug store until 1912. Then he joined the Health Department as a bacteriologist. In 1917, he obtained his medical degree and taught pharmacy at the Medical College of South Carolina.

In 1920, he was appointed health officer, and has held that position since that time. During the period 1923-1935, he served as both county and city health officer.

During his tenure of service, Dr. Banov has been awarded many honors commending him for his public service, both from the medical profession and from other organizations.

He was a delegate to the International Hygiene Conference in Dresden, Germany, in 1930. He also served as president of the South Carolina Public Health Association.

Dr. Banov is a member of B'nai B'rith. He is a past president of District Grand Lodge 5; the Rotary Club, Elks, Ancient Free Masons, the Alpha Omega Alpha and Rho Chi Fraternities, and many other organizations.

---

## ANNOUNCEMENTS

---

The next annual joint meeting of the North Carolina, Eye, Ear, Nose, and Throat Society and the South Carolina Society of Ophthalmology and Otolaryngology will be held in Charleston, South Carolina, on September 15, 16, and 17, 1959. Invitations are extended to our colleagues in the states of Virginia, Georgia, Florida and Tennessee. There will be three guest Otolaryngological speakers and three guest Ophthalmological speakers. Likewise, one member from each Society will give a paper. A large attendance is anticipated.

---

Publication of a new pamphlet containing a bibliography on health insurance has been announced by the Health Insurance Institute.

The pamphlet draws together lists of books, annual publications and periodicals in the field of health insurance. In addition, it has chapters dealing with literature on general insurance, gerontology, social security and other data pertinent to research in the field. One section is devoted to the first known listing of national organizations having a relationship to the task of financing medical care costs.

The publication, entitled "A List Of Worthwhile Health Insurancee Books," is available upon request to: Health Insurance Institute, 488 Madison Avenue, New York 22, N. Y.

---

### INSTITUTES FOR PHYSICIANS AND NURSES IN THE CARE OF PREMATURE INFANTS

The Institutes for Physicians and Nurses in the Care of Premature Infants are being continued at the New York Hospital—Cornell Medical Center. These Institutes are designed to meet the needs of physicians and nurses in charge of hospital premature nurseries and special premature centers and of medical and nursing directors and consultants in state and local premature programs.

Institutes for the 1959-60 fiscal year are scheduled to start on the following dates:

September 21, 1959, November 2, 1959, January 4, 1960, February 8, 1960, May 9, 1960.

The intensive program for physicians is of two weeks duration and that for nurses is of four weeks duration (full-time). The first two weeks for nurses is given concurrently with the one for physicians. A stipend is provided to both physicians and nurse attending.

For further details, please write:  
Dr. Hilla Sheriff, Director  
Division of Maternal and Child Health  
S. C. State Board of Health  
Columbia 1, S. C.

The Department of Maternal and Child Health of the School of Public Health of the University of North Carolina wishes to announce again the availability of a fellowship in maternal and child health for the academic year commencing next September. This fellowship is available to a physician enrolling in the School of Public Health, and undertaking a program of study leading to the degree of Master of Public Health with specialization in maternal and child health. The program of study is intended to prepare individuals for administrative or consultative responsibilities in maternal and child health programs.

This scholarship provides for (a) full tuition and fees at the School of Public Health, University of North Carolina, (b) a monthly stipend of \$400, and (c) an additional monthly allowance of \$30 for each dependent.

Apply to the Chairman, The Admissions Committee, School of Public Health, University of North Carolina, Chapel Hill, North Carolina, as early as possible. The award is usually made about July first.

---

The Department of Otolaryngology, University of Illinois College of Medicine, announces two special postgraduate courses to be offered in the fall of 1959:

#### ANNUAL OTOLARYNGOLOGIC ASSEMBLY

The Assembly will be conducted September 18 through September 26, 1959, and will consist of a series of lectures and panels concerning advancements in otolaryngology. Some of the sessions will be devoted to surgical anatomy of the head and neck and histopathology of the ear, nose and throat. Guest lecturers will participate in an entire day's program reviewing the latest advances and principles of temporal bone surgery.

Chairmen of the Assembly are Maurice F. Snitman, M. D., and Emanuel M. Skolnik, M. D.

#### COURSE IN LARYNGOLOGY AND BRONCHESOPHAGOLOGY

The course in laryngology and bronchoesophagology, under the chairmanship of Paul H. Holinger, M. D., is scheduled November 9 through November 21, 1959.

Interested physicians should write direct to the Department of Otolaryngology, 1853 West Polk Street, Chicago 12, Illinois.

---

The Arthritis and Rheumatism Foundation offers predoctoral, postdoctoral and senior investigatorship awards in the fundamental sciences related to arthritis for work beginning July 1, 1960. Deadline for applications is October 31, 1959.

These awards are intended as fellowships to advance the training of young men and women of promise for an investigative or teaching career. They are not in the nature of a grant-in-aid in support of a research project.

The program provides for three awards:

- (1) *Predoctoral Fellowships* are limited to students who hold a bachelor's degree. Stipends range from \$1500 to \$3000 per year, depending upon the family responsibilities of the Fellow.
- (2) *Postdoctoral Fellowships* are limited to applicants with the degree of Doctor of Medicine, Doctor of Philosophy—or their equivalent. These Fellowships are tenable for one year, with prospect of renewal. Stipends range from \$4000 to \$6000 per year, depending upon the family responsibilities of the Fellow.
- (3) *Senior Investigator Awards* are made to candidates holding or eligible for a "faculty rank" such as Instructor or Assistant Professor (or equivalent) and who are sponsored by their institution. Stipends are from \$6000 to \$10,000 per year and are tenable for five years.

A sum of \$500 will be paid to cover the laboratory expenses of each postdoctoral fellow and senior investigator. An equal sum will be paid to either cover the tuition expenses or laboratory expenses of each predoctoral fellow.

For further information and application forms, address the Medical Director, Arthritis and Rheumatism Foundation, 10 Columbus Circle, New York 19, N. Y.

#### APPLICATIONS FOR RESEARCH SUPPORT NOW BEING ACCEPTED BY AMERICAN HEART ASSOCIATION

Applications are now being accepted by the American Heart Association for support of research to be conducted during the fiscal year beginning July 1, 1960.

September 15, 1959, is the deadline for applying for Research Fellowships and Established Investigatorships. Applications for Grants-in-Aid must be made by November 1, 1959.

Public contributions to the annual Heart Fund campaign provide the funds for Association-supported research. Support is given not only to studies with a direct bearing on problems of cardiovascular medicine but also to basic research in a wide range of scientific disciplines. The Association recently announced its national awards for the 1959-60 fiscal year, representing an allocation of approximately \$3,300,000.

Following are brief accounts of the categories in which applications may be made:

*Established Investigatorships:* Awarded for periods of up to five years, subject to annual review, in amounts ranging from \$6,500 to \$8,500 yearly plus dependency allowances, to scientists of proven abil-

ity who have developed in their research careers to the point where they are independent investigators. In addition, a grant of \$500 is made to the investigator's department. Applicants for Established Investigatorships may apply for grants-in-aid to support their research at the same time they apply for Established Investigatorships.

*Advanced Research Fellowships:* Awarded for periods of one or two years to postdoctoral applicants who have had some research training and experience but who are not clearly qualified to conduct their own independent research. During the second year of tenure they will be permitted to spend up to 25 percent of their time in professional and scientific activities not strictly of a research nature, provided that these will contribute to their professional development and do not involve services for a fee. These stipends range from \$4,600 to \$6,500 annually. Additionally, a grant of \$500 is made to the investigator's department, as in the case of Established Investigators.

*Research Fellowships:* A limited number of awards are available to young men and women with doctoral degrees for periods of one or two years to enable them to train as investigators under experienced supervision. Annual stipends range from \$3,800 to \$5,700.

*Grants-in-Aid:* Made to experienced investigators to help underwrite the costs of specified projects, such as equipment, technical assistance and supplies.

Further information and application forms may be obtained from the Assistant Medical Director for research, American Heart Association, 44 East 23rd Street, New York 10, N. Y.



"BUT, DOCTOR, I CAME IN TO SEE YOU ABOUT MY DANDRUFF!"



---

## DEATH

---

DR. W. B. RYAN, JR.

Dr. William Butler Ryan, Jr., 68, died May 8 at his home in Beaufort after a long illness.

Dr. Ryan was a captain in the medical corps in World War I, serving with Canadian forces before the United States entered the conflict.

Surviving are the widow; four brothers, Capt. Frank Ryan, U. S. Navy medical corps (Ret.) of California; Dr. Pinckney Ryan and Dr. John Ryan, both of Ridgeland, and Dr. Thomas Ryan, Spartanburg, and two sisters.

---

### HILL-BURTON HOSPITAL CONSTRUCTION IN SOUTH CAROLINA

The South Carolina State Board of Health was designated by Legislative Act No. 247 of the Acts and Joint Resolutions of South Carolina in Regular Session in 1947 to administer the Hospital and Medical Facilities Construction Program in South Carolina and was authorized to establish a division of Hospital Construction to accomplish the duties called for therein. This Act, which was enacted by the General Assembly and approved by Governor Strom Thurmond on May 10, 1947, was passed subsequent to the enactment of Public Law 725 (known as the Hill-Burton Act) by Federal lawmakers in August 1946. The Hill-Burton Act authorized Federal grants to states, on a matching basis, to pay part of the cost of constructing public and other nonprofit hospitals and related health facilities.

In accordance with the Federal Law the Governor appointed a Hospital Advisory Council to advise and consult with the Board of Health and its legal representatives in carrying out the administration of the Licensing and Construction programs. The Council consists of twenty-seven (27) members as follows: five hospital administrators who are recommended by the South Carolina Hospital Association, five physicians recommended by the South Carolina Medical Association, two registered nurses, two recognized architects, one dentist to be recommended by the South Carolina Dental Association, one registered pharmacist to be recommended by the South Carolina Pharmaceutical Association, nine representatives of the consumers of hospital services who have been selected from persons familiar with the need of such services in urban or rural areas, and two representatives from the Board of Public Welfare (the State Constitution forbids dual office holding so the Governor was unable to appoint these two members). This Council meets at least once every three months or as frequently as necessary.

The President, on January 18, 1954, submitted to Congress a health message in which he recommended that the Hill-Burton Program be broadened to include



*Marlboro County Hospital Chronic Disease Unit, Bennettsville, S. C.*—A 24-bed chronic disease addition containing, among other things, areas for physical and occupational therapy constructed under Public Law 482 (an amendment to P. L. 725, Hill-Burton Program) and completed in 1958 at a total cost of \$332,094.28.

Architect: Lafave, Fair, Lafaye & Associates, Columbia, S. C.

General Contractor: Atlantic Building Corp., Columbia, S. C.

Photo by: E. S. Powell, S. C. State Board of Health.

additional assistance for the construction of public and other non-profit hospitals for the care of the chronically ill as well as assistance in construction of nursing homes, diagnostic and treatment centers and rehabilitation facilities. Based on this, The Congress enacted Public Law 482 on July 12, 1954.

In accordance with the Law and Federal Regulations, the Agency annually develops a State Plan which is a document taking inventory of existing hospitals and medical treatment facilities in the State, determining the need for additional facilities and establishing a program for their orderly development according to established principles of need and



*Georgetown County Hospital Nurses' Home, Georgetown, S. C.*—A graduate nurses' residence constructed under the Hill-Burton Program (P. L. 725) and completed in 1953 at a total cost of \$63,053.64.

Architect: Hopkins, Baker & Gill, Florence, S. C.

General Contractor: Ruscon Construction Co., Charleston, S. C.

Photo by: E. S. Powell, S. C. State Board of Health.



*Cherokee County Memorial Hospital, Gaffney, S. C.*—A 104-bed general hospital constructed under the Hill-Burton Program (P. L. 725) and completed in 1956 at a total cost of \$1,207,624.49.

Architect: Walter Hook & Associates, Charlotte, N. C.  
General Contractor: T. C. Brittain Co., Decatur, Ga.  
Photo by: E. S. Powell, S. C. State Board of Health.

priority. The Plan is a flexible document subject to revision by the State Agency upon the advice and consultation of the Hospital Advisory Council. Each State Plan and Revision is reviewed and approved by the Surgeon General of the U. S. Public Health Service. Federal grants to eligible sponsors are matched on a 50-50 basis. Facilities that are eligible for construction under the Hill-Burton program are as follows: general, mental, tuberculosis hospitals, public health centers, nurses' homes and training facilities, nursing homes, diagnostic and treatment centers, rehabilitation facilities and facilities for the care of the



*The Brooks Infirmary, State A & M College, Orangeburg, S. C.*—A 22-bed infirmary which is inspected annually and licensed by the S. C. State Board of Health as an "institutional infirmary".

chronically ill. South Carolina's average annual allotment under the Hill-Burton Act amounts to approximately \$2.5 million.

In connection with the licensing responsibility, the Agency develops, establishes, promulgates and en-

forces basic standards for the care and treatment of persons in hospitals and related institutions. Institutions that maintain and operate organized facilities for the diagnoses, treatment or care of two or more nonrelated persons for periods exceeding 24 hours are required to be licensed by State Law. This area of jurisdiction encompasses such institutions as general, chronic and tuberculosis hospitals, nursing homes and institutional infirmaries. In accordance with a 1951 State Act privately owned educational institutions are not licensed. Mental institutions are licensed by the South Carolina Mental Health Commission. Institutions that fail to comply with the minimum licensing Standards in a specified period of time are required



*Spartanburg General Hospital Out-Patient Department, Spartanburg, S. C.*—An out-patient addition which was constructed under P. L. 482 (an amendment to the Hill-Burton Act) and completed in 1957 at a total cost of \$65,577.36.

Architect: Lockwood Greene Engineers, Spartanburg, S. C.

General Contractor: Fiske-Carter Construction Co., Greenville, S. C.

Photo by: E. S. Powell, S. C. State Board of Health.

to have a hearing before a Licensing Committee which is a sub-committee of the Hospital Advisory Council. Annually the Agency issues approximately 165 licenses to hospitals and related institutions throughout the State.

The accompanying photographs depict the various types of facilities which have been built in South Carolina under the Hill-Burton Program and also graphically represent institutions which are licensed by the Agency.





## STATES RIGHTS IN HOSPITALS

There has long been widespread dissatisfaction with many of the rulings of the Joint Commission on Accreditation of Hospitals. Undoubtedly the Hospital Standardization Program started by the American College of Surgeons in 1920, with the object of creating "in the hospital an environment which will assure the best possible care of the patient", did a lot to improve the standards of hospitals throughout the country. Certainly there were hospitals which needed policing. Just as certainly there were many hospitals which were superior and did not need policing. The work of the American College of Surgeons was taken over in December 1951 by the Joint Commission.

It is felt by many that the Joint Commission, instead of consolidating the gains made by the American College of Surgeons, has increased the number of regulations and technical minutiae to an intolerable extent, thereby working hardships on many of our very best hospitals. As an example, one of Baltimore's best hospitals recently after an inspection by a representative of the Joint Commission had its accreditation extended for only one year instead of for the customary three years. One of the principal reasons given for this ruling had to do with stairwells and fire hazards. Yet the hospital had regularly passed inspection by the Baltimore Fire Department and had one of the lowest fire insurance rates obtainable. The question of the fine patient care uniformly maintained in this fine hospital was apparently not even considered. Yet such a ruling makes it difficult for this hospital to get interns now, when at one time it had many more applicants for internships than there were places.

Most of the objections to the rulings of the Joint Commission have hitherto been voiced in doctors' cloak rooms. Very few have appeared in print. In a recent issue of *Current Medical Digest* (June 1958, p. 63) your guest editor made bold to put some of the criticisms often heard in cloak rooms on the printed page. The result was an avalanche of letters of approval from all parts of the country. They wrote that their sentiments had been voiced. They said that the number of meetings required by the Joint Commission was preposterous and out of proportion to the amount of new and important material at hand. One wrote that the query "'Is private practice then to be controlled by a group of non-practitioners?' would have been more timely fifteen years ago. Non-practitioners are *now* in control of most medical institutions. They are, therefore, in control of all medical disciplines."

But must they necessarily stay so? It is true that

there is a deplorable trend in our country towards the centralization of government. Dicta are being handed down from Washington which are obnoxious to a large segment of our people. Federal bureaucrats are running roughshod over every principle of sound government and of common decency. If they ever knew that local self-government is the foundation stone of democracy, they have either forgotten it or treat it with the utmost contempt.

Are we then also to have centralized control of medicine? What has become of the principle of states rights, of local self-government, and of the dignity of the individual?

Quite naturally all of us want our hospitals to have high standards and the PATIENT, who is the central figure, to have the best possible care. Many of the requirements of the Joint Commission actually militate against this by taking up the doctor's time in annoying, irritating, and unnecessary paper work as well as in unnecessary meetings. The Stover Report (*J.A.M.A.*, 162, 499, 1956) stated that attendance requirements at staff meetings should be set up locally and not by the Commission. This recommendation of reverting to local self-government was ignored by the Commission.

Recently the House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland passed a resolution stating that the presently existing methods of approving and disapproving hospitals for accreditation adversely affect the potentialities and effectiveness of such institutions generally and the patient, interne, and visiting physicians associated with such hospitals specifically. (A copy of this resolution is to be sent to the Joint Commission and to all State medical societies.) Shortly afterwards the Maryland Chapter of the American College of Surgeons took similar action. Certainly where there is such a complete lack of rapport between fine physicians and the Joint Commission, there is something wrong, and I do not believe that the trouble is with the doctors who run the hospitals.

Now, what to do about it. The obvious thing seems to be for all the states to follow the example of Maryland in a grassroots revolt against centralization. If we are to have a central accrediting body, a local committee should advise them with regard to local hospitals. We can, and should, stop the present system of having inspectors, who are often of nothing like the caliber of the staff physicians concerned, pass upon accreditation or non-accreditation of hospitals staffed by doctors who are far more competent than they are.

Amos R. Koontz, M. D.

From *The Virginia Medical Monthly* 85:665





## NARUROPATY AND AN EDITOR REAR THEIR HEADS

### BILL DESIGNED TO CURB THE "CLOSED SHOP" TREND

It shall be unlawful (1) to deny any citizen or (2) for any organization or association to conspire to abridge or destroy the right of citizens of this state "to exercise a reasonable choice in selecting their religious affiliation, their legal representation, and the method of treatment of their ills; provided that such choice shall be limited to professional or religious groups that are recognized by either state or federal statutes."

That's the heart of a bill introduced in the South Carolina General Assembly by Reps. Mitchell and Addis of Oconee County, and others.

The bill is based upon contention that "there is a growing trend to abrogate the inherent rights of the citizens of the state" and that "such abrogation is frequently promoted by organizations or associations seeking to further their own private interests."

Dr. Mitchell, for one, should know whereof he speaks. As a naturopath who operated a nice hospital, he suddenly found his profession arbitrarily banned by legislative act.

He contends that if his profession, which is recognized in other states and which previously was recognized and regulated in South Carolina, can be banned, then the same ban may be applied to other professions.

Why, he wants to know, should citizens who desire such treatment be denied the right to receive it? He is not alone in raising this question.

Certainly it is the duty of the public, through its lawmakers, to protect itself against quacks and charlatans. That can best be accomplished through reasonable regulations and requirements, as is the case with other types of doctors and professional men.

What Dr. Mitchell and his co-sponsors are trying to do is to extend South Carolina's "right to work" law to members of professions who, in growing numbers, are being threatened by "closed shop" actions of various associations and organizations.

Anderson *Independent*, April 11, 1959

---

## BOOK REVIEWS

---

**MATERNITY**—A Guide to Prospective Motherhood. F. W. Goodrich, Jr., M. D. New York. Prentice-Hall, Inc. 1959. Price \$1.75.

This is an easy-to-read, adequate prenatal guide, neither better nor worse than others on the market in either content or cost. Its simplicity and brevity have much to recommend it. Probably more young mothers would read it in preference to some of the other more sophisticated publications.

James M. Wilson, M. D.

**GENERAL UROLOGY**, by Donald R. Smith, M. D., University of California. Illustrated by Ralph Sweet. 2nd Edition, 1959; Lange Medical Publications, Los Altos, California. Price: \$4.50.

This is the second edition of a book which has already proved its value and usefulness, especially for the medical student and medical practitioner who have not specialized in urology. The descriptive matter is concise and to the point; the illustrations are excellent, and the whole format of the book is pleasing. By reason of the use of soft binding, and modern reproduction processes in the preparation of the book, the cost has been kept at a figure which will appeal to students and in fact to anyone else, yet nothing has been sacrificed to make this a most handy manual and reference book.

There have been a number of changes made since the first edition appeared and many of the illustrations have been replaced or improved. This book can certainly be recommended highly for the field which it proposes to cover.

Paul W. Sanders, M. D.

---

**THE PLASMA PROTEINS**, Clinical Significance. Paul G. Weil, M. D., Ph.D., J. B. Lippincott Company, Philadelphia, 1959. Price \$3.50.

I found it to be fairly easy to read, to understand, and it seems to cover fairly the plasma proteins. As a reference to jog the memory, it may serve a purpose. As a primary reference, it is too terse with too little primary data. As a discussion to show the importance of plasma proteins to the field of medicine, it accomplishes its mission. It indicates the protein relationship to most fields of medicine. It is my opinion that a moderate expansion of explanations with the inclusion of numerical ranges would have improved the book and made it a good general, readable, desk reference. The 49 references are probably enough to indicate sources, but it would have been better if each chapter had noted the main sources of information.

Robert V. Moore, Ph.D.

---

**BIOSYNTHESIS OF TERPENES AND STEROLS**. A Ciba Foundation Symposium. Edited by G. E. W. Wolstenholme and Cecilia M. O'Connor. J. and A. Churchill Ltd., London. 1959 and Little, Brown and Co. Boston. 1959. Pp 311. Price \$8.75.

This book presents the current thoughts of a most distinguished group of biochemists on the status of biosynthesis of certain terpenes and sterols with the emphasis on cholesterol and its precursors. This is a highly specialized subject and the subject matter presented assumes a working knowledge of the subject prior to the new presentation. It is inherent in any symposium for each author to set forth for other specialists in the field the current research and though of his own laboratory. This limits the appeal

In  
smooth  
muscle  
spasm...



- controls  
*stress*
- relieves  
*distress*

## Pro-Banthine<sup>®</sup> with Dartal<sup>®</sup>

**Pro-Banthine—**  
*unexcelled for relief of cholinergic spasm—*  
has been combined with

**Dartal—**  
*new, well-tolerated agent for stabilizing emotions—*  
to provide you with

**Pro-Banthine with Dartal—**  
for more specific control of functional gastrointestinal  
disorders, especially those aggravated by emotional  
tension.

**Specific Clinical Applications:** Functional gastroin-  
testinal disturbances, pylorospasm, peptic ulcer, gas-  
tritis, spastic colon (irritable bowel), biliary dyskinesia.

**Dosage:** One tablet three times a day.

**Availability:** Aqua-colored tablets containing 15 mg.  
of Pro-Banthine (brand of propantheline bromide)  
and 5 mg. of Dartal (brand of thiopropazate dihydro-  
chloride). G. D. Searle & Co., Chicago 80, Illinois.  
Research in the Service of Medicine.

**SEARLE**

and the value of the book. This book does uphold the high standards of the Ciba Foundation Symposiums for the authors are foremost in their field and the material is up to date and lucidly presented.

---

*CHILDBEARING BEFORE AND AFTER* 35. Adrien Bleyer, M. D. New York. Vantage Press 1959. Price \$2.95.

Although this short (109 pages) book purports to be for the general public, it is doubtful to the reviewer that any appreciable number even of intellectual people will read or digest it. Although simply done, its statistical approach and many charts will frighten the bravest layman.

It is a study of the incidence of defects in the newborn in women over and under thirty-five years of age, showing the marked preponderance in the older group of mongolism, achondroplasia and congenital heart disease. Most congenital defects, previously classed as hereditary in origin, are now thought to be the result of stress (largely anoxia) on the foetus early in its development. Such stress is more likely to occur with aging and the increase in chronic diseases in the mother.

While it offers no solution to the problem except earlier childbearing, the book is well worth the reading of any physician engaged in the treatment of chronic diseases as well as the obviously concerned pediatrician and obstetrician.

James M. Wilson, M. D.

---

*DISEASES OF CHILDREN IN THE SUB-TROPICS AND TROPICS*, by H. C. Trowell and D. D. Jelliffe. London. Edward Arnold (Publishers), Ltd., 1958. The Williams & Wilkins Co., Baltimore, exclusive U. S. agents. Price: \$18.50.

This is an excellent volume which covers what its title indicates, and omits long accounts of diseases which are common in other areas than in the sub-tropics and tropics. Thus there is no great duplication of material to be found in many other standard text or reference books. This work touches not only on diseases as such, but on the problems of customs and manners in the tropical areas, the question of hospitals adapted for special purposes, and public health and sociological problems in general which play such a large part in the prevalence or control of disease. To a reviewer in South Carolina there is much that

might be considered applicable in his own area, or at least might have been applicable not very many years ago. A number of the conditions described are to be found in this part of the United States.

The book is a collection of contributions by a number of different writers from various parts of the world. It is well documented, and is in pleasing format. The illustrations are good, and the writing is agreeable. The standing of the contributors should speak for the soundness of the views expressed.

In this reviewer's opinion, this is an excellent book which should serve well those of the profession who are concerned with the problems which it covers.

JIW

---

*LEUKEMIA*. By William Dameshek, M. D. and Frederick Gunz, M. D. 420 pages. Grune and Stratton, Inc., New York. Price \$15.75.

This text is the first major attempt to assemble the published studies of leukemia since the work of Fortner in 1938 and is especially appropriate in view of the importance of this disease plus the increasing ability to control it even if only temporarily.

Following a complete discussion of the etiology and pathology of leukemia, the clinical manifestations are discussed in perhaps too brief a fashion and with overemphasis on some of the more bizarre and unusual complications. The serum protein abnormalities are well covered and are helpful in understanding many of the manifestations of the ultimate decline of the patients.

An excellent review of the "Myeloproliferative" disorders (such as polycythemia vera, myeloid metaplasia and Di Guglielmo syndrome) is included and notes the inter-relationship of this group to the leukemias. The difficulty of exact diagnosis without following the course is demonstrated by representative case histories.

The present forms of therapy are adequately covered with the author's recommended treatment schedules. This remains largely a matter of individual preference and must be tailored to the specific case.

Doctors Dameshek and Gunz have fulfilled a very important function with this book and have included an excellent bibliography of pertinent articles. It is invaluable as a reference and a welcome addition to the library of anyone interested in hematology.

C. deS.





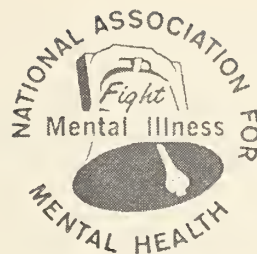
**EMERGENCY TREATMENT AND MANAGEMENT**, by Thomas Flint, Jr., M. D. 2nd ed. Philadelphia: W. B. Saunders Co., 1958. Price \$8.00.

A second edition of this work is offered to include the developments and more effective methods of treatment of emergencies in the four years since the first edition. Expansion of the section on emergencies in children and inclusion of the developments in barbiturate and narcotic intoxication, cardiac arrest, cold and diving injuries, shock and arterial injuries are the impetuses for the new edition.

The addition of outlined considerations of medicolegal importance regarding court testimony and malpractice is of debatable value. The reviewer believes it is worthwhile since it serves as a quick introduction to key medicolegal questions likely to confront the medical tyro in his first efforts in the accident room.

The book is continued as an outline of the conditions of unexpected appearance one encounters in hospital emergency rooms and offices. The readily available form permits rapid evaluation of an unfamiliar accident and the completeness of its treatment. The presentation is quite detailed and the data is sufficiently current to satisfy the newest intern arriving in the emergency theater. The presence of the book in the emergency rooms, clinics, offices and automobiles of all physicians treating unlimited acute illness should be a source of comfort.

Louie B. Jenkins, M. D.



## ESTES SURGICAL SUPPLY COMPANY

Phone WALnut 1700-1701

56 Auburn Avenue

ATLANTA, GA.

## ATTENTION PHYSICIANS — RESIDENTS and INTERNES ARE YOU CONTEMPLATING ENTERING PRIVATE PRACTICE SOON? WE CAN EQUIP YOUR OFFICE COMPLETE

The following on display . . .



Electrocardiographs  
Examining & treatment  
room furniture  
Microwave diathermys  
Ultrasonic therapy units  
Scientific equipment

Diagnostic equipment  
Laboratory supplies  
Surgical instruments  
Fracture equipment  
Sterilizing equipment

*and many other items*

We invite you to our stores. Let our **SPECIAL-  
LY TRAINED PERSONNEL** help you make  
your selection. **SEE what you BUY, BEFORE  
you BUY IT.**

HAMILTON Examining & Treatment Table

*Distributors of KNOWN BRANDS of PROVEN QUALITY*



# W i n c h e s t e r

CAROLINAS HOUSE OF SERVICE



**Winchester Surgical Supply Co.**  
119 East 7th St. Tel. 2-4109 Charlotte, N.C.

**Winchester-Ritch Surgical Co.**  
421 W. Smith St. Tel. 5656 Greensboro, N.C.

# Today's Health

PUBLISHED BY THE American Medical Association

FOR THE AMERICAN FAMILY

## A Good Buy in Public Relations

★ Place it in your reception room

Today's Health is published for  
the American Family by the  
American Medical Association, 535  
N. Dearborn St.—Chicago 10, Illinois

Give your subscription order to a member of  
your local Medical Society Woman's Auxiliary,  
who can give you Special Reduced Rates.

### ADVERTISERS

Ames Company  
Appalachian Hall  
Armour Company  
Brawner's Sanitarium  
Burroughs-Wellcome & Co.  
Charles C. Haskell Co.  
Coca-Cola Company, The  
Davies, Rose & Co., Ltd.  
Drug Specialties  
Eli Lilly & Company  
Estes Surgical Supply Co.  
Geigy Pharmaceuticals, Inc.  
General Electric Company  
Green Acres, Inc.  
Highland Hospital  
Irwin, Neisler & Co.  
Jones & Vaughan, Inc.  
Kent Cigarettes  
Lederle Laboratories  
Mayrand, Inc.  
Merch, Sharp & Dohme  
Parke, Davis & Company  
Pfizer Laboratories  
Physicians Casualty Company  
Physicians Products Co.  
Pinebluff Sanitarium  
Professional Management South  
Purdue Frederick Co.  
Riker Laboratories, Inc.  
A. H. Robins Co., Inc.  
J. B. Roerig & Co.  
Schering Corporation  
Sealy of the Carolinas  
G. D. Searle & Co.  
Smith-Dorsey  
Smith, Kline, & French  
E. R. Squibb & Sons  
United States Brewers Foundation  
Upjohn Company  
Wallace Laboratories  
Wampole Laboratories  
Waverley Sanitarium, Inc.  
Winchester Surgical Supply Co.  
Winthrop Laboratories, Inc.  
World Insurance Co.

### WAVERLEY SANITARIUM, INC.

(FOUNDED IN 1914 BY DR. AND MRS. J. W. BABCOCK)

HOSPITAL CARE AND TREATMENT OF NERVOUS AND MENTAL DISORDERS  
ADMISSIONS LIMITED TO WHITE WOMEN  
SPECIALIZING IN SHOCK THERAPY  
INCLUDES OUT-PATIENT DEPARTMENT FOR BOTH SEXES

DR. CHAPMAN J. MILLING, MEDICAL DIRECTOR  
DR. JAMES B. GALLOWAY — DR. PENROD G. HEPPER  
SENIOR ASSISTANT PHYSICIANS

FOR RESERVATION CALL  
SUPERINTENDENT 2-4273  
FIRE SPRINKLER SYSTEM THROUGHOUT HOSPITAL

2641 FOREST DRIVE  
COLUMBIA, S. C.

# The Journal

of the

## South Carolina Medical Association

VOLUME LV

July, 1959

NUMBER 7

## THE TRANQUILITY OF THE EVENING

GUNNAR GUNDERSEN, M. D.

President, American Medical Association

In recent months, I have been reading a wide variety of opinions on the broad subject of old age. What has interested me has been the universal interest and curiosity in this subject throughout man's history. From the days of Plato to the present, many of the world's great thinkers have pondered the joys and sorrows associated with advanced years. Opinions range from the cynical to the hopeful.

For example, La Rochefoucauld, writing in 17th century France, said:

"In growing old, one grows more foolish and more wise."

On the other hand, the great Victorian statesman, Benjamin Disraeli, wrote:

"Youth is a blunder; manhood a struggle; old age a regret."

But I personally prefer this statement by Somerset Maugham:

"For the complete life, the perfect pattern, includes old age as well as youth and maturity. The beauty of the morning and the radiance of noon are good, but it would be a very silly person who drew the curtains and turned on the light in order to shut out the tranquility of the evening."

Such a view expresses the quiet optimism of a man enjoying old age. For many people, this attitude brings comfort and happiness in the final years of life. But others are not so fortunate.

Each year, thousands of senior citizens are virtually condemned to exile by an unthink-

ing society. The celebration of their 65th birthday means for many an unwanted push out of active living. They are thrown out of work, ostracized from society and forced to live on drastically reduced incomes.

Of course, this description does not apply to everyone over 65. Many of our senior citizens lead comfortable, active and rewarding lives. But there are many who cannot. It is this second group I shall talk about today.

Since my return from the Far East a few weeks ago, I have visited several state societies. At each meeting, the concern over health care for the aged has overshadowed all discussion. Time and again, I have been asked *what* we are doing to meet this urgent need, and *why* there is such concern over it.

Certainly we all are aware that health care for the aged is a very pressing challenge to American medicine. Although we recognize this need, some might be hazy about the reasons for our concern.

As part of my answer, let me read you this quote by Benjamin Franklin, written when he was 31 years old:

"I perceive myself to be growing old," he wrote. Although Franklin lived another 53 years, he had sound reasons for his statement. In his day, the average life-span was 35 years.

Since then, however, the life expectancy of Americans has more than doubled, so that a child born today can expect to live into his 70s. Just 10 years ago, that figure was 65.

Right now there are approximately 15 million people over 65, or one out of every 11



citizens. By 1980, that proportion will have jumped to one out of seven.

The reasons for such a lengthening of man's lifespan can be found in the unprecedented progress of medical science and sanitation. In a sense, the medical profession and its allies in the health field are largely responsible for more people living longer.

But the blessings of longer years for everyone have not come unaccompanied. Along with advanced age have come a host of worries and ailments.

Childhood killers have been conquered, but now that life expectancy has been extended, we are faced with those degenerative diseases and chronic ailments which were relatively rare in past generations.

Because medicine shares a responsibility for these new problems, I believe we have the obligation to try to overcome them. And overcome them we must, for without a doubt, if we fail, there are others ready to step in.

In this case, the "others" represent the federal government, which, for the last few years, has been taking an increased interest in medical matters. For example, there is now pending before Congress a bill which would provide certain hospital, surgical and nursing home benefits to most social security beneficiaries.

Because of such Congressional rumblings, I believe American medicine has another prodding reason to provide health care for the aged. It is reasonable to warn that once health care is subsidized for those over 65, there is good reason to believe Congress will extend such benefits gradually to other age groups, until we have nation-wide compulsory health insurance. But such a drastic change need not take place, since medicine has a plan of its own, one which offers realistic health coverage to our senior citizens.

For years now, we have been anticipating the enormous changes and problems touched off by more people living longer. In the past, a major obstacle between old people and good health care has been one of economic difficulty. For years, an illogical, capricious system of compulsory retirement based on chronological age has forced a large segment of our population to adjust suddenly to living

on drastically reduced—and often inadequate—incomes.

Because this situation has been mushrooming, American medicine has been preparing to meet it. We have anticipated the ultimate need of a program to provide health care tailored to the reduced incomes of our senior citizens. All aspects of the problem have been studied—not just medical, but social, economic, occupational and psychological. Out of intensive research and study, we have developed a program which is both practical and effective, one which will help the aged help themselves.

It is a program by which the individual can *plan ahead* for health expenses in his later years.

It is a program steeped in the traditional American concept of *voluntary* action on the part of the individual. There is no compulsion, no dependency on the government, no financial burden on others or on tax funds.

It is a *flexible* program, based on the knowledge that the needs of our senior citizens are many, and could never be solved by a rigid plan.

Since our program has been developed, several significant steps have been taken to set it into motion.

1. Last December, our House of Delegates unanimously adopted a proposal concerning those of our population 65 and over with modest resources or low family incomes. For medical services to this group, physicians have been asked to accept a level of compensation that will permit the development of low cost health insurance and prepayment plans.

2. State and local medical societies throughout the nation have responded to this call by acting to implement the plan at their annual meetings this spring. Already, many state societies have developed low-cost coverage for old people.

3. A number of commercial insurance firms have introduced guaranteed-renewable contracts, "paid-up-at-65" and "65-plus" policies. At the AMA's suggestion, the Health Insurance Association of America has urged its member companies to provide policies renewable for life . . . coverage for those *now*

over 65 . . . coverages that will continue after retirement . . . and policies which offer the opportunity to convert from group to individual contracts when employment ends.

4. The AMA House of Delegates has vigorously denounced the widespread policy of compulsory retirement based on chronological age. Although retirement certainly is a long-awaited and well-deserved blessing for many of our senior citizens, we believe it should be voluntary, based on the desires and capabilities of the individual.

Our Committee on Aging has suggested that labor and industry leaders re-evaluate compulsory retirement policies.

5. The AMA has called attention to the urgent need for more facilities designed to fit the health requirements of the aged. Medical and health needs of our senior citizens range a full cycle from those who are completely independent and able to take care of themselves to those who require 24-hour-a-day care in a hospital. In the middle of this cycle are the nursing homes and homemaker services.

These steps are part of the way we are setting in motion our program to provide realistic medical and health care for the aged. Although we have realized the urgency of this situation, our first concern has been to come up with a plan that is more than just glamorous or idealistic, but rather one which will provide tangible help.

For these reasons, we oppose those who would use the expedient or hasty shortcuts to the aging problems, such as the foolish philosophy of "pass-a-law-and-raise-the-social-security-tax-again."

Time, however, will not stand still for our planning. While we are busy developing the best possible plan for our senior citizens, there are forces at work ready to turn the needs of the aged to political advantage. Prime example of the expedient, vote-conscious method is the Forand Bill.

For a number of reasons, Washington observers doubt that Forand-type legislation will make much headway in Congress this year. However, they warn we can expect it to be pushed for all it is worth during the presidential election year of 1960.

Therefore, instead of just offering opposition to undesirable legislation, our immediate task is to mobilize the entire medical profession to help develop widespread, low-cost health insurance coverage for old people.

Regardless of how fine a plan we develop, regardless of how enthusiastically we talk about it, its success, and the success of American medicine, depends on what you and I *do* about it. If our plan is to succeed, if medicine is to earn the gratitude of the nation's aged and of future generations of senior citizens, we must do more than pay lip service. You and I must make this plan work.

Old age does not mean the end of the road. It should mean the continuation of an active rewarding life. Perhaps in our approach to the subject of aging, we might keep in mind the words of an unknown author who wrote:

"Youth is not a time of life. It is a state of mind. It is not a matter of ripe cheeks, red lips and supple knees; it is a temper of the will—a quality of the imagination—a vigor of the emotions.

"Nobody grows old by merely living a number of years—people grow old only by deserting their ideals. Years wrinkle the skin, but to give up enthusiasm wrinkles the soul. Worry, doubt, self-distrust, fear and despair—these are the long, long years that bow the heart and turn the greenening spirit back to dust.

"Whether 60 or 16, there is in every human being's heart the lure of wonder, the undaunted challenge of events, the unfailing child-like appetite for what next, and the joy of the game of living.

"We are as young as our self-confidence, as old as our fear; as young as our desire, as old as our despair."



# AORTIC DISSECTION (Dissecting Aneurysm)

## Report of a case with surgical repair

DALE GROOM, M. D., EDWARD F. PARKER, M. D., AND WILSON GREENE, M. D.\*  
Charleston S. C.

One of the most dramatic and rapidly fatal vascular accidents is that of spontaneous dissection of the aorta. Customarily referred to as dissecting aneurysm, it might more properly be designated according to its basic pathology which is that of a splitting and dissection between layers of the wall of the aorta by blood under pressure, rather than a dilatation or bulging of a localized area of the vessel wall. Until recently the clinical diagnosis of this lesion, which has been recognized pathologically for many years, was of more or less academic interest inasmuch as there was no available treatment capable of altering the course of the disease and preventing the ultimate rupture and sudden death. The advent of surgical procedures for repair of aortic dissection has brought with it a new and more fruitful interest in the ante mortem diagnosis of this disease.

### *Clinical and Pathologic Aspects*

Predominant in the clinical picture of aortic dissection is pain. Characteristically it is sudden in onset, of extreme severity, often "tearing" in nature and progressing in stages from above downward. Location of the pain is dependent upon the site of the lesion; with involvement of the arch it is typically substernal with radiation through to the back, notoriously simulating that of myocardial infarction. Blood pressure may rise with the unremitting pain, or may fall to shock levels as blood fills and distends the adventitious lumen of the aorta. Often accompanying extension of the dissection are manifestations of partial or complete occlusion at the origins of the various branches of the aorta, including differential blood pressure changes in the extremities, renal impairment, or paraplegia resulting from involvement of the intercostal branches supplying the spinal cord. Similarly a coronary artery may be occluded at its

ostium or the aortic valve may be rendered incompetent, signifying dissection in the proximal portion of the aorta. Rupture of the thin-walled false lumen with fatal hemorrhage into one of the body cavities is the rule within hours, days or weeks, although rarely the dissection may remain intact for months or even years without gross impairment of arterial blood supply. In such cases the double-lumen area of aorta may be a surprise finding at autopsy of a patient who has had perhaps evanescent neurologic signs following what was construed as a heart attack.

Traditionally this disease has been ascribed to a medial degeneration of the vessel allowing dissection by blood under pressure following a tear through the intima. Its association with hypertension, with Marfan's syndrome, and perhaps with pregnancy and coarctation has been noted. Although it is predominantly a disease of middle age and beyond, rarely, it seems, does the tear occur at the base or edge of an atheromatous plaque. Notable is the fact that the aorta, which can be demonstrated to be capable of withstanding many times the hydraulic pressures encountered in the human body, can be split remarkably easily between its layers when they are separated longitudinally. This, together with the observed occurrence of aortic dissection without an obvious intimal tear, has led to the more recent theory that the initial lesion may be hemorrhage from the vasa vasorum within the wall of the vessel, contributed to by other vessels (including branches of the aorta) as the dissection proceeds, with the rent in the intima being the consequence rather than the instigating factor in the process. A consideration of these mechanisms is of practical importance in the surgical approach to aortic dissection.

### *Surgical Aspects*

Location and extent of the area of dissection, whether this be related to the loca-

From the Departments of Medicine and Surgery, Medical College of S. C., Charleston, S. C.  
\*Dr. Greene is now in Sumter, S. C.



tion of the initial lesion or not, is of course crucial to the surgical approach as well as to the clinical manifestations and prognosis. About 90% of a series of 22 cases from the Mayo Clinic<sup>1</sup> had some involvement of the aortic arch, with the descending thoracic and abdominal portions of the aorta involved in almost as many instances. Usually the intimal tear is found in the ascending portion, just above the semilunar valve, or in the region of the ligamentum arteriosum and left subclavian artery.<sup>2</sup> A less common site is in the abdominal aorta. No consistent relationship has been demonstrated between size of this tear (which is sometimes transverse, sometimes longitudinal, and commonly on the order of 1 cm. or so in length) and extent of the dissection.

The 1935 report of a case of dissecting aneurysm operated upon by Gurin, Bolmer and Derby<sup>3</sup> has brought them credit for the first attempt at surgical intervention. Almost twenty years then passed before this lesion was generally regarded as potentially amenable to operation. The advent of mechanical pump oxygenators for extracorporeal maintenance of circulation has opened the way for more definitive repair of the lesion under direct vision. At first the objective was that of closing the tear in the intima with the idea of thereby isolating the false lumen from the systemic blood pressure, halting the progress of dissection, and averting rupture of the adventitia and fatal hemorrhage. Such a procedure has certain obvious limitations and does not allow for any other source of dissecting pressure, either primary or secondary. A second method of attack was one of fenestrating the intima, creating a second communication between the normal and the false aortic lumen, presumably for re-entry of the blood from the dissected area back into the normal aortic lumen. It is questionable whether this would materially alter the pressure gradients or decrease the likelihood of rupture, the major cause of death. Furthermore, the fenestration approach does not take into account the observation that many of these cases already have two tears in the intima.<sup>4</sup> From a practical standpoint it would appear that any section of aorta having a dis-

section of its wall should either be repaired by apposition of the dissected layers, obliterating the false lumen, or should be replaced by a mechanically competent structure, i.e., a graft. DeBakey has reported more than a score of cases (in which the dissection was primarily in the descending thoracic aorta) so treated with an operative mortality of between 25 and 30%.<sup>5</sup>

#### *Case Record*

A 59 year old power-line foreman was brought to the Medical College Hospital by ambulance with the diagnosis of dissecting aneurysm. With him were two chest roentgenograms (Fig. 1 left, center) substantiating that diagnosis, one made on a routine examination a month previously, the other dated the day prior to admission. He was known to have had asthma and pulmonary emphysema for many years with symptoms of a decreased respiratory reserve, and for several months had received cortisone daily for control of his asthma. Also of interest was the history of a long standing hypertension, group II, for which he had been treated with apresoline.

Two days previously, while sitting quietly at home watching television, he had experienced a sudden onset of severe pain in the epigastrium radiating through to the back. He was immediately unable to stand and noted paresthesias in his legs and feet. On examination his blood pressure was found to have fallen from its usual average of 180/110 mm. Hg. to near shock levels. Next day the pain continued, but with an ascending distribution extending up into the mid-chest, and he became mentally confused, disoriented, and required restraint. Urine output nevertheless remained adequate. His blood pressure then gradually rose to its former hypertensive range and motor function returned to his lower extremities.

The significant findings on admission were those of acute delirium, hypertension, and advanced pulmonary emphysema with distant respiratory and heart sounds and a dusky hue to the lips and nailbeds. Arterial pulses were unimpaired in all four extremities although aortic pulsation could not be felt in the abdomen. There were no objective neurological abnormalities. Laboratory studies including the complete blood count, urinalysis, hematocrit and blood urica nitrogen were within the normal ranges. An electrocardiogram was not remarkable except for a sinus tachycardia.

Roentgenographic examinations of the patient's chest and abdomen disclosed aneurysmal dilatation of the entire descending thoracic aorta, extending into the arch, and a generalized pulmonary emphysema. Aortograms were then made by means of a catheter inserted through the left brachial artery as far as the mid-portion of the ascending aorta. Radio-opaque dye injected through the catheter was

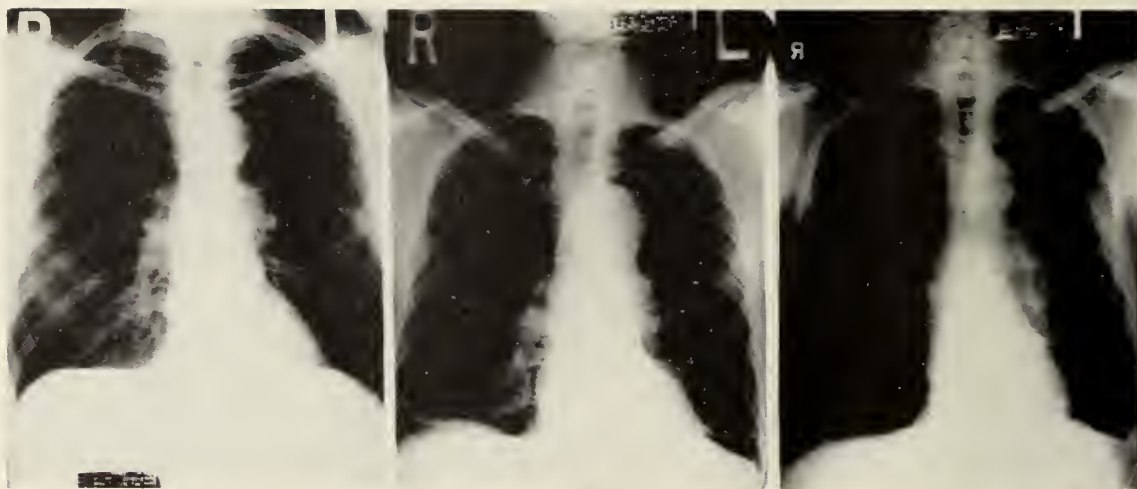


Fig. 1. Postero-anterior chest roentgenograms on the patient immediately before (center) and one month after (right) operation for aortic dissection. The size of the aortic arch may be compared with that shown on the left in a film made during a routine examination four weeks prior to his acute illness.

observed to produce opacity in only about two-thirds of the width of the dilated arch with none of the dye passing into the surrounding false lumen of the vessel.

For two days thereafter the patient continued to have pain which subsequently extended into the lower back. His temperature rose to 101 - 102° F. and he became exceedingly restless in spite of analgesics, sedation, and supportive therapy. Nevertheless his blood pressure became stabilized at about 160/90, his electrocardiogram remained unchanged, and no cardiac murmurs were audible at any time nor was there any other indication of further spread of the dissection proximally.

In view of the obvious prognosis and the urgency of the patient's situation, operative intervention was decided upon with the intent of finding and suturing, if possible, the tear in the intima and possibly obliterating at least a portion of the dissecting lumen—this despite the admittedly high risk and the known involvement of the arch. Accordingly the patient digitalized and given replacement cortisone therapy, and a left thoracotomy was performed on the fourth hospital day, the sixth day after onset of his acute illness.

The aorta was observed to be diffusely enlarged to approximately 8 cm. in diameter from the diaphragm to the origin of the innominate artery. Proximal to this point there was no evident abnormality and all major branches of the arch could be seen to pulsate normally. A mechanical pump apparatus was then employed to by-pass blood from the left atrium into the femoral artery at a flow rate of 1200 to 1400 ml. per minute. The aorta was mobilized for a distance of 12 cm. distal to the subelavian artery (necessitating division of six intercostal arteries on the left, leaving the corresponding branches on the

right intact) and the dissected area of aorta was isolated proximally and distally with occluding clamps. Between these clamps the vessel was then opened longitudinally and an inner lumen of normal size was found, encompassed by an outer lumen formed by the dissected layers of wall and filled with blood and clots. Rupture through the remarkably thin outer layer appeared to be imminent.

After what seemed at first a fruitless search, a laceration about 1 cm. in length was found in the intima of the aorta adjacent to the point of attachment of the ligamentum arteriosum. Because of the precarious structure of the adventitial wall, the possibility of an additional undisclosed rent in the intima, and the feasibility of accomplishing a more definitive repair in the dry field provided by the by-pass pump, it was then decided to resect as much of the dissected area as practicable and replace it with a graft. A 9 cm. length of aorta extending from the origin of the left subelavian artery distally and including the area of intimal rupture was removed. Continuous annular sutures between the intima and adventitia were employed to obliterate as much of the remaining false lumen at both ends as possible after removal of enough clot to allow apposition of the dissected layers. Continuity of the aorta was then restored by insertion of a Teflon graft by end-to-end anastomoses. Total time on the by-pass pump was one hour and forty minutes, during which the patient received a total of 4500 ml. of whole blood. Except for a transient cardiac arrhythmia and marked restlessness and confusion his postoperative course was one of gradual mental and physical improvement. He was discharged from the hospital as an ambulatory patient three weeks after admission. Follow-up examinations of this patient one, three, and twelve months after operation revealed no recurrence of aortic dissection.



That the adventitious lumen was actually obliterated by the annular sutures and later by further organization of any remaining clots is revealed by the size of the aortic knob in his chest films a marked reduction one month after operation (Fig. 1, right), and a further decrease to a normal size shadow when he was examined three months post-operatively. At that time no mental, neurologic nor vascular residua of his illness were evident and the patient was considered to be capable of normal activities.

Pathologic study of the excised tissue in this case revealed a moderate atherosclerosis, an increase in "ground substance" of the media without any evidence of cystic medial necrosis, and an active fibroblastic proliferation in the adventitia. The split had occurred in the outer layers of the media, the separated wall being about one-third the thickness of the remaining inner wall. Location of the intimal tear was not adjacent to, nor apparently related to, any atheromatous plaque. Neither was the degree of atherosclerosis excessive on pathologic or clinical evaluation.

### Discussion

Several features of this case deserve comment. Though the etiology of aortic dissection is uncertain, the absence of medial necrosis here is of interest. Moreover the previously described association with hypertension may be a significant clue but one wonders why, if arterial pressure is an important factor, the disease is not encountered more frequently as a complication of far advanced hypertension.

The onset, the clinical course, and the roentgenographic findings in this case were sufficiently typical of aortic dissection that at no time was there any serious question of the initial diagnosis. An unusual feature was the ascending pattern of pain from the epigastrium into the chest, suggesting that the dissection may have originated well below the arch and ascended to the point of the observed intimal tear. Had it originated in the ascending aorta, as most commonly occurs, progression of the pain would probably have been from the mid-chest downward and there

would have been a far greater likelihood of distortion and incompetence of the aortic valve, interference with coronary blood flow, or extravasation of blood into the pericardium—all of which were ruled out with reasonable certainty by clinical observation. Most ominous was the known involvement of the aortic arch (the precise extent of which could not be determined preoperatively) and the futility of any attempt to replace the entire arch with a graft. The condition of the abdominal aorta remained uncertain except as to its patency, demonstrated by sustained renal function and normal arterial pulsations below.

The aortograms contributed nothing beyond confirmation of the diagnosis. Conceivably a multi-plane technique might have delineated the extent of the dissection but injection of the dye at any site along the aorta could hardly be expected to disclose the tear in the intima unless there were considerable blood flow through the defect. Furthermore, proof is lacking that closure or excision of such a defect removes the cause of further progression. A better understanding of the basic mechanism of aortic dissection might influence profoundly the surgical approach to this disease. In any event it would appear that at present restoration of a mechanically sound aortic wall affords a patient such as this the best chance of survival.

### Summary

The clinical, pathologic, and surgical aspects of spontaneous aortic dissection have been reviewed. A case is presented with a one year follow-up illustrating successful repair of a dissection involving a portion of the arch and the descending thoracic aorta. Procedures directed toward restoration of mechanical integrity of the dissected area of aortic wall offer the best chance of avoiding the major complications of aortic dissection, those of rupture and fatal hemorrhage.

### REFERENCES

1. Burchell, H. B.: Aortic dissection (dissecting hematoma; dissecting aneurysm of the aorta). *Circulation* 12:1068, 1955.
2. Creech, O., Jr., DeBakey, M. E. and Cooley, D. A.: Diagnosis and treatment of dissecting aneurysm of aorta. *GP* 14:125, Sept. 1956.
3. Gurin, D., Bulmer, J. W. and Derby, R.: Dissecting aneurysm of the aorta. Diagnosis and operative relief of acute arterial obstruction due to this cause. *New York J. Med.* 35:1200, 1935.
4. McBurney, R. P. and Rodda, T. S.: Dissecting aneurysm of the aorta: a new surgical problem. *Am. Surgeon* 24:381, 1958.
5. DeBakey, M. E., Cooley, D. A., Crawford, E. S. and Morris, G. C., Jr.: Aneurysms of the thoracic aorta. *J. Thoracic Surg.* 36:393, 1958.



# TRIAMCINOLONE THERAPY IN DERMATOLOGY

J. R. ALLISON, M. D. AND J. R. ALLISON, JR., M. D.  
Columbia, S. C.

In recent years, the extensive use of corticosteroids in many fields of medicine has stimulated the search for corticoid analogues less likely to produce undesirable manifestations while obtaining full anti-inflammatory, anti-allergic, anti-pruritic potency. Continued modification of the structure and hence of the biological spectrum of these steroids has in many instances led to more favorable therapeutic agents without the usual troublesome side effects.

A new corticosteroid recently placed at the disposal of the clinician is triamcinolone, (Kenacort), a fluroderivative of prednisolone. Markedly anti-inflammatory, anti-allergic, anti-pruritic and anti-rheumatic in action, triamcinolone has been found effective in the treatment of allergic disorders, rheumatoid arthritis and certain collagen diseases and dermatologic conditions.<sup>1-11</sup> In contrast to the retention of sodium and water which frequently led to discontinuation of therapy with earlier steroids, ingestion of triamcinolone often induces a sodium and water diuresis which is slight, but persistent for a period of several weeks. Because of the favorable results achieved with triamcinolone by other investigators in established indications for corticosteroid treatment, an appraisal of this steroid in the management of the common and acute and chronic dermatoses was undertaken.

## *Method of Treatment*

A series of 51 patients with acute and chronic disorders encountered in an office practice were treated with oral doses of triamcinolone (Kenacort) for short periods of time (generally ranging from 2 days to 2 months). No patient was treated for longer than 4 months, hence the observations presented here represent a short-term analysis of the efficacy and the undesirable activities of Kenacort rather than an extended evaluation of the material. Suppressing doses of 8 to 48 mg. were administered during the initial day of therapy to 31 patients with acute and subacute dermatoses to control severe disturbing

eruptions (Table 1). Where continued medication was indicated, the dosage was decreased by 4 mg. every 1 to 2 days until a maintenance level was attained as indicated by the clinical response.

A group of 19 individuals with chronic dermatoses were given 8 to 16 mg. of triamcinolone (Kenacort) initially, and the dosage was gradually reduced by 4 mg. every two days as the acute manifestations were controlled. An occasional patient of this group was maintained on 8 to 12 mg. daily for one or more months (Table 2).

In a parallel study, Kenacort was employed to suppress an acute process (Table 1). No attempt was made to provide prolonged treatment in chronic skin diseases after the clearing of the acute "flare-up" state. It was postulated that fewer undesirable effects would be induced if medication were withdrawn where a clinical response was achieved and reinstituted when subsequent episodes of re-activation required control measures. Routine examinations were carried out to determine fluctuations in the body weight and in the blood pressure and urinary sugar levels in the majority of the cases during the course of treatment. The patients were carefully observed throughout the investigation for manifestations of untoward reactions to the corticosteroid compound.

## *Results*

The response of 31 patients with representative acute and subacute dermatoses is summarized in Table 1. The benefits observed with Kenacort in 19 patients with acute manifestations of chronic dermatoses is presented in Table II. No undesirable manifestations were observed in this series of patients during Kenacort therapy, except as noted below under "Case 3" which is described in detail because of some of the unusual features. Many of these cases required only two weeks of treatment with this agent for clearing of their eruptions. Although several individuals exhibited an elevated blood pressure level prior

TABLE I — *Response of Acute and Subacute Dermatoses to Short-Term Oral Therapy with Triamcinolone (Kenacort)*

Diagnosis	No. of Patients	Treatment	Response			
			Excellent	Good	Fair	Poor
Contact dermatitis	22	8-48 mg. in first 24 hours	13	8	0	0
			no follow-up in 1 case			
Dermatitis medicamentosa	3	16 mg. in first 24 hours	2	0	0	0
			no follow-up in 1 case			
Erythema multiforme	4	16-24 mg. in first 24 hours	3	1	0	0
Acrodermatitis	1	32 mg. in first 24 hours	1	0	0	0
Urticaria	1	16 mg. in first 24 hours	1	0	0	0

to this study or were considered to be borderline hypertensives, no further rise in levels was observed in any instance with the Kenacort therapy. Certain precautions were observed, however, throughout the investigation. One patient, for example, who was obese and a borderline hypertensive, was given repeated

short courses of Kenacort, each of which was continued only long enough to control the recurring episodes of contact dermatitis of the axillary region; however, because of the past history, maintenance therapy was not considered advisable in this woman. Several patients with a previous history of peptic ulcer

TABLE II — *Response of Acute Episodes of Chronic Dermatoses to Short-Term Oral Therapy with Triamcinolone (Kenacort)*

Diagnosis	No of Patients	Treatment	Response <sup>o</sup>			
			Excellent	Good	Fair	Poor
Atopic dermatitis	6	1 mg. three times daily for children; 8-16 mg. initially for adults	2	4	0	0
Seborrheic dermatitis	5	8-16 mg. in the first 24 hours; then gradually reduced	0	4	1	0
Psoriasis	2	16 mg. initially then gradually reduced	1	1	0	0
Dyshidrosis	2	4-16 mg. initially	0	2	0	0
Light sensitivity	1	16 mg. initially	1	0	0	0
Epidermolysis bulbosa	1	1 mg. twice daily in a child	1	0	0	0
Lichen planus	1	16 mg. initially	0	1	0	0
External otitis	1	16 mg. initially	0	1	0	0

<sup>o</sup> Remission of acute exacerbation

showed no aggravation of gastrointestinal symptoms during treatment. No patient complained of headache, sleepiness, dizziness, or weakness. It was not possible to evaluate the long term effects of Kenacort therapy in this short-term investigation.

#### *Report of Cases*

Three cases are presented to illustrate the dramatic usefulness of Kenacort for the rapid suppression of very severe acute dermatoses which usually prove to be incapacitating for extended periods.

Case 1: This woman, 39 years of age, bordered on congestive heart failure and exhibited blood pressure readings of 150/94 mm. of mercury. She presented for treatment an acute bromedema with pustules, ulcers and generalized painful nodules. The blood bromide level was 165 mg. per 100 ml. In addition to conventional treatment, 4 mg. doses of Kenacort were administered every four hours initially, and then at gradually decreasing intervals as the patient responded. Kenacort was given both to supply a general anti-inflammatory action and to prevent a toxic nephritis which frequently occurs in severe cases when active treatment is initiated. This patient showed an impressive response to Kenacort without any adverse reactions or signs of toxicity. The medication exerted no decompensating effect on the cardiac status and the patient was discharged in 10 days.

Case 2: This boy, 11 years of age, presented an acute and severe poison ivy dermatitis with an extensive involvement about the eyelids so that the eyes were virtually swollen shut. In addition, the patient had an active smallpox vaccination which complicated the treatment problem. Since vaccine could be assumed to be present in the raw itching areas, local corticosteroid therapy was not considered desirable. Kenacort was administered by mouth in divided doses totaling 20 mg. during the first day and then gradually decreased by 4 mg. each day. Again there was a dramatic response to therapy, and the course of the eruption was significantly shortened. No adverse reactions to Kenacort were observed.

Case 3: White female, age 49 with one year history of recurrent painful erythematous nodular lesions on the anterior and lateral aspects of the right leg. Biopsy showed evidence of traumatic fat necrosis with an impression of nodular vasculitis. This patient's symptoms were cured while on 4 mg. of Kenacort four times a day. Then because of considerable infection around her few remaining teeth, these were removed. This course was long and chronic and after three months on this therapy and while having the

teeth removed, this patient's blood pressure rose from 128/90 to 150/105 mm. of mercury and she developed some of the features of Cushing's syndrome. What part the removal of the teeth may have had in these symptoms was difficult to determine. Along with these features, there was a five-pound gain in weight, but on diuretics and after decreasing the dosage of Kenacort, the patient returned to a normal balance. She was kept on Kenacort in dosages varying from 2 to 16 mg. and after the teeth were extracted and being on Kenacort for slightly over 4 months, she was apparently cured. At no time did this patient complain of any headaches, dizziness, weakness, nor was any abnormal hair growth or other signs of abnormal side reactions noted except as stated above.

#### *Summary*

Triamcinolone (Kenacort), a modified corticosteroid, was demonstrated to be an effective oral medication for the suppression of the active episodes of the frequently occurring acute and chronic dermatoses. From observations in this study, it appears that Kenacort is slightly more potent than the older corticosteroids in its anti-inflammatory, anti-allergic and anti-pruritic activities. In addition, it appeared to have less tendency to induce sodium and water retention, psychic stimulation or gastro-intestinal distress.

A good to excellent response was achieved in 29 of 31 patients with acute skin disorders, and in 18 of 19 patients treated for acute "flare-ups" of chronic skin disorders. Even in chronic dermatoses, by employing short-term Kenacort therapy to clear the eruption, and re-instituting medication to control the subsequent, recurrent relapses, adverse reactions were largely avoided. Except as noted in Case 3, above, no hypertension, edema, symptoms of peptic ulcer, headaches, dizziness or weakness were observed with this therapeutic regimen in this series of 51 patients. In many cases, Kenacort was given for a period of two weeks or less. It was not possible to evaluate the long-term effects of Kenacort therapy in this short-term investigation. The study clearly demonstrates, however, that Kenacort administered judiciously is a valuable medication in dermatologic practice.

#### REFERENCES

1. Shair, H. M.: New Methods In Dermatology: A review of the past ten years. *Amer. Pract. & Digest. Treat.* 7(8):1268, Aug. 1956.
2. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: *Dermatology*. Philadelphia, W. B. Saunders Co., 1956, pp. 308-313.



3. Sherwood, H. and Cooke, R. A.: Preliminary evaluation of a new corticosteroid in allergic diseases. *Jour. Allergy* 28:97, 1957.
4. Hellman, L., Zumoff, B., Schwartz, M. K., Gallagher, T. F., Bernsten, C. A., Jr., and Freyberg, R. H.: Antirheumatic and metabolic effects of a new synthetic steroid. American Rheumatism Association, Interim Session, Bethesda, Md., Nov. 30, 1956. Abstract and Discussion in *Annals of Rheumatic Dis.* 16:141, 1957.
5. Freyberg, R. H., Bernsten, C. A., Jr., and Hellman, L.: Further experiences with 9-alpha-fluoro, 16-alpha-hydroxyhydrocortisone (triamcinolone) in the treatment of patients with rheumatoid arthritis. *Arthritis & Rheum.* 1:215, 1958.
6. Friedlaender, S. F. and Friedlaender, A. S.: Use of triamcinolone, a new corticosteroid, in the management of allergic disease. *Antib. Med. & Clin. Ther.* 5:315, 1958.
7. Hollander, J. L., Brown, E. M., Jessar, R. A., Smukler, N. M., Udell, L., Shanahan, J. R., Stevenson, C. R. and Bowie, M. A.: The effect of triamcinolone on psoriatic arthritis. *Arthritis & Rheum.* 1:258, 1958.
8. Hartung, E. F.: Triamcinolone in the treatment of rheumatoid arthritis. *J.A.M.A.* 167:973, 1958.
9. Dubois, E. L.: Triamcinolone in the treatment of systemic lupus erythematosus. Abstract, *Clin. Research* 6:65, 1958.
10. Dubois, E. L.: Triamcinolone in the treatment of systemic lupus erythematosus. *J.A.M.A.* 167:1590, 1958.
11. Shelley W. B., Harun, J. S., and Pillsbury, D. M.: The treatment of psoriasis and other dermatoses with triamcinolone. *J.A.M.A.* 167:959, 1958.

## MEDICAL COLLEGE CLINICS

### THE MEDICAL COLLEGE OF SOUTH CAROLINA

#### ELECTROCARDIOGRAM OF THE MONTH

##### Hypocalcemia (Hypoparathyroidism)

DALE GROOM, M. D.  
Charleston, S. C.

*Case Record*—The sequence of related events in this 44 year old patient's history was, in itself, almost sufficient for a diagnosis. It included an operation for goiter a dozen years previously, followed by progressive weakness, the onset of seizures with loss of consciousness and generalized convulsions, soreness and stiffness of the muscles of the extremities, and surgical removal of bilateral cataracts at age 38. Concurrently she had received treatment for anemia and premature menopause, along with an anticonvulsive medication. Her health prior to the thyroidectomy was said to have been excellent and there was no previous nor family history of a convulsive disorder.

Significant physical findings were obesity, pallor, lethargy and a generalized hyporeflexia. Tetany was readily demonstrable by the Chvostek and Trousseau signs. Her serum calcium at the time this electrocardiogram was made was 5.8 mg., the phosphorus 6.5 mg., and the total proteins 5.24 grams per 100 ml. (Other blood chemistries were: sodium 344, potassium 13.6, chloride 348, and blood urea nitrogen 13 mg.). The hematocrit was 27 vol. %. Extensive roentgenographic examinations showed no gross abnormality of bone structure, and the heart was observed fluoroscopically to be diffusely enlarged with feeble pulsation of the cardiac borders. An electroencephalogram was reported as normal.

The patient was treated with calciferol (vitamin

D<sub>2</sub>), calcium lactate, a diet low in phosphorus with aluminum hydroxide gel to impair phosphorus absorption, ferrous sulfate and desiccated thyroid. Within two weeks her urinary excretion of calcium rose to normal as measured by the Sulkowitch test. Serum calcium level was then 10.3 and the phosphorus 4.1 mg. %.

Notable in the patient's clinical improvement was the disappearance of both convulsions and all clinical manifestations of tetany.

*Electrocardiogram*—The most unusual feature is the prolongation of the Q-T interval to almost 0.6 sec.—far beyond the range of normal. Specifically, it is the ST segment which is prolonged; the T wave begins at about the point it should normally end. In all leads the T waves are either flat, diphasic or inverted.

The rhythm is a regular sinus one at a rate of 83. Voltage of the QRS complexes and of virtually all the deflections is moderately low throughout, lower than can be accounted for in the standardization deflection which is only slightly less than the regulation 10 mm. The P-R of 0.20 is rather long for this rate but within normal limits.

*Discussion*—The Q-T interval (sometimes inaptly called "electrical systole" as though it accurately demarcated a mechanical event) comprises the QRS complex, the ST segment, and the T wave. Its duration is subject to variations by a number of physiologic processes, one of the most specific of which is the lengthening of the ST portion which occurs with low levels of calcium ion in the blood. Apparently hypocalcemia delays the process of repolarization. While it is debatable how much, if any, the T waves are altered, there is a definite inverse relationship

proportion of children, and we want the course to help the real family doctor."

They decided to name the school the Southern Pediatric Seminar; that it was to be held at Saluda, North Carolina, Dr. Smith's summer home, as he operated there a private hospital for children and a charity institution, the Spartanburg Baby Hospital. Thus they would have a sufficient number of cases for use as clinical material.

All that winter Dr. Smith and Dr. Richardson wrote friends at the various medical schools and teaching centers in the South, and also to doctors actually practicing pediatrics, as their idea from the first was to give the students not only theory but practical things they could use every day in their offices.

The Southern Pediatric Seminar is in a way the story of one man, brusque, abrupt, tender-hearted Dr. Smith, though many others contributed to it. Its story is "the story of a man who mastered the art of living," as Dr. George R. Wilkinson of Greenville, South Carolina, himself a faculty member, said in dedicating a plaque erected to the memory of Dr. Smith at the Medical College of S. C. in 1955. "Born of noble parents, conditioned by the adversity of a cruel war and its aftermath of Reconstruction, Dr. Smith, along with his brothers and sisters, obtained an education. By sacrifice of his parents and his own zeal, he finished college and studied medicine in Charleston, S. C.

"He began the practice of medicine in a mountain county, where practice was hard, both physically and emotionally. The appeal of a suffering and impoverished people—living far apart, with prejudices, rugged individualism and ignorance, especially in rudimentary hygiene—gave the young doctor the heat of the crucible necessary for building deep conviction. Traveling by foot and on horseback, over many long roads and trails, furnished the isolation necessary for thinking through many problems. Hovering over a kerosene lantern, with the lines around the whip, trusting a faithful horse, Dr. Smith often made his way home far after the countryside lay asleep. His concern was not for his own convenience and pleasure, but for

the patient left behind. Aside from the difficulty in diagnosis and the meager pharmacopeia at hand, his thoughts were about food, sanitation and bedside care.

"With reluctance he moved to Great Falls, where conditions bettered his family. Density of population increased his patient roster. Less time was lost traveling lonely roads. But he worked long hours, and studied when many would have gone to bed. His education was advanced by attending medical meetings and availing himself of many short courses in medical centers such as the New York Polyclinic in 1909, the New York Post Graduate Medical School in 1914 and the Pediatric Department of the Harvard Medical School in 1916.

"In 1909 Dr. Smith moved his family to Spartanburg. By 1913 his work with children had increased to the point where he was obliged to confine his work to the field in which his deepest interest lay. During the summers he built up an enormous practice in Saluda, just across the line in North Carolina. His friends joined hands and built and maintained a baby hospital for the poor.

"With the facilities created by himself, his family and friends, he still was not satisfied. From his own experiences, he was convinced that in order to improve other physicians in the care of children, short courses in a cool, comfortable place—not too far from where the doctors lived—would provide a medium through which what he had learned could be made more widespread. So the Southern Pediatric Seminar was born. For the Seminar Dr. Smith worked with great zeal and sacrifice.

"The faculty was made up of friends he had made while visiting and attending many hospital seminars and universities. Those who came to teach were delightfully entertained by his devoted wife, who took care of the faculty in her own home.

"His second ambition was to see the Medical College in Charleston move forward and take its rightful place among similar institutions. To this end he worked through the alumni, raising funds for a library building. As a member of the State Board of Health of South Carolina for many years, he endeavored to focus the activities of the board toward

preventative medicine, particularly in children. Beginning in 1914, he attended the children at Cedar Springs, the state institution for the deaf and blind.

"While president of the State Medical Association in 1925 and 1926, he was instrumental in starting a post-graduate seminar at the Medical College in Charleston. In all his activities, Dr. Smith had the happy faculty of putting himself in the background, while promoting those who occupied the stage, asking no credit and seeking none. His reward was satisfaction derived from implementing needed medical facilities.

"Busy as he was, Dr. Smith took time out to master the art of living. He knew how to play and when to stop, how to make new friends and how to keep them. His principal activities were centered about his home, where his wife and four children absorbed his interests, shared in the fun and grew up with him.

"As host and hostess, Dr. and Mrs. Smith will always be loved by those who were privileged to visit in their home.

"In the sunset of his career, he was sustained by the success of his children and the institutions to which he had contributed during his life. All that is mortal of Dr. Lesesne Smith rests in the bosom of the soil in the red hill country close to the church he loved, but his spirit pervades these halls and lives on in the shade of the tall trees on the hilltop at Saluda."

That first summer, in 1921, the Seminar had sixteen lecturers and only five registered students. With apologies to Sir Winston Churchill, "Never have so many given so much for so few!"

The lecturers were:

- Dr. William Mulherin, Augusta, Ga.
- Dr. Frank Howard Richardson, Brooklyn, N. Y. and Black Mountain, N. C.
- Dr. William P. Cornell, Columbia, S. C.
- Dr. William Weston, Columbia, S. C.
- Dr. Laurence T. Royster, University, Va.
- Dr. R. M. Pollitzer, Greenville, S. C.
- Dr. Lewis Elias, Asheville, N. C.
- Dr. J. LaBruce Ward, Asheville, N. C.
- Dr. C. V. Akin, U. S. Public Health Service, Washington, D. C.
- Dr. Francis Johnson, Charleston, S. C.
- Dr. W. L. Finkhouser, Atlanta, Ga.

- Dr. J. D. Love, Jacksonville, Fla.
- Dr. E. A. Hines, Seneca, S. C.
- Dr. Oren Moore, Charlotte, N. C.
- Dr. O. L. Miller, Charlotte, N. C.
- Dr. Lesesne Smith, Spartanburg, S. C.

Dr. Mulherin, who was Chairman of the Pediatric Section of the Southern Medical Association at the time, was elected Dean of the Seminar; Dr. Frank Howard Richardson, Vice-Dean and Dr. Smith, Registrar.

Dr. Mulherin must have had a secret formula. He never appeared in anything but immaculate, starched, white Palm Beach suits and managed to keep them that way, rain or shine. His courtly manners were a delight. He discharged the duties of his office conscientiously from 1921 until 1936.

At his resignation Dr. Samuel F. Ravenel of Greensboro, N. C. took office and served in this capacity until 1950, being followed by Dr. Julian Price of Florence, S. C. and Dr. Warren Quillian of Coral Gables, Florida. These busy men, all leaders in their profession, served faithfully and with distinction. One of the highlights of the meeting was the daily exchange of wit among these three.

During the second year twenty-two students attended. From then on the school gained momentum and registered from seventy-five to one hundred twenty-five men each summer.

The third year Drs. Owen H. Wilson, Nashville, Tenn., Robert Strong, Charles H. Bloom of New Orleans La., Ross Snyder and Stewart Welch of Birmingham Ala. were added to the faculty.

Dr. Bloom was another sample of sartorial perfection and arrived each summer with a large trunk full of clothes, although he never stayed longer than a week. He could "pinch-hit" in an emergency, as he was prepared to give seventeen lectures, though usually slated for only three.

During the first year, two days were spent at Black Mountain, N. C. and the rest of the time at Saluda. After this, all of the courses were given at Saluda. The first classes were held in a tent rented from a revivalist, and it was not until later that a lecture hall named in memory of Dr. William P. Cornell was erected, although the informal atmosphere still prevailed. Spittoons were convenient for



shirt-sleeved student doctors with suspenders showing. It was before the age of the sport shirt.

Other early members of the faculty were:

Dr. Oliver Hill, Knoxville, Tenn.  
Dr. Alfred Walker, Birmingham, Ala.  
Dr. Charles Bray, Birmingham, Ala.  
Dr. J. Mason Knox, Baltimore, Md.  
Dr. W. C. Davison, Durham, N. C.  
Dr. Horton Casparis, Nashville, Tenn.  
Dr. A. J. Waring, Savannah, Ga.  
Dr. Kenneth Lynch, Charleston, S. C.  
Dr. Mynor Beach, Charleston, S. C.  
Dr. J. Warren White, Greenville, S. C.  
Drs. Robert and Hamilton McKay, Charlotte, N. C.

Dr. G. W. Kutsher, Jr., Asheville, N. C.  
Dr. Luther Holloway, Jacksonville, Fla.  
Dr. Philip Mulherin, Augusta, Ga.  
Dr. James W. Bruce, Louisville, Ky.  
Dr. Hines Roberts, Atlanta, Ga.  
Dr. Samuel F. Ravenel, Greensboro, N. C.

Somewhat later the following were added to the faculty:

Dr. Warren Quillian, Coral Gables, Fla.  
Dr. Robert Lawson, Coral Gables, Fla.  
Dr. George Wilkinson, Greenville, S. C.  
Dr. Lesesne Smith, Jr., Spartanburg, S. C.  
Dr. George Dean Johnson, Spartanburg, S. C.  
Dr. Julian Price, Florence, S. C.  
Dr. William Weston, Jr., Columbia, S. C.  
Dr. Amos Christie, Nashville, Tenn.  
Dr. Lee Bivings, Atlanta, Ga.  
Dr. Angus McBryde, Durham, N. C.  
Dr. J. M. Arena, Durham, N. C.  
Dr. Ambrose McGee, Miami, Fla.  
Dr. Hughes Kennedy, Jr., Birmingham, Ala.

If Dr. Smith, until his death in 1947, was the moving spirit of the Seminar, it may be noted that no man ever had more assistance from his friends and family in the realization of a dream.

His only daughter, Nettie Smith Owings, and her husband, Dr. M. A. ("Jake") Owings, Professor of English at Clemson College, managed the cottages, improved the grounds and ran the dining hall on "Smith Hill," where the Seminar was located. Dr. Owings was Secretary and Treasurer of the Seminar, and from 1931 on never missed a session except during the war years, when he served as a colonel in an armored division in Europe.

Miss Mary Virginia Kohn of Montgomery, Alabama and Mrs. Owings both served as gracious hostesses for the faculty and the

families of the Students. Miss Kohn entertained all who attended at her charming summer home, "Sunset Cabin."

Dr. D. Lesesne Smith, Jr., eldest son of Dr. Smith shouldered the responsibilities of Registrar and Program Chairman from 1947 on. He, like his father, worked all through the year on the Seminar and counted it a privilege. An invaluable assistant to him in promotional work was Mr. Nelson Hampton.

Dr. Keitt Smith of Greenville, S. C., the second son, was a faculty member, and Mr. Poreher Smith, the youngest son, of Myrtle Beach, S. C. was a member of the Board of Directors.

Every grandchild in the family helped during the weeks of the Seminar, doing everything from cleaning the grounds to being used as well baby clinic material or running the snack bar.

At first both the faculty and the students stayed in the rustic cottages on Smith hill and had their meals in the central dining hall (some people still dream wistfully of those blueberry muffins!) Mrs. Dudley Cozby, Mrs. Owings and Mrs. I. A. Trively each served as Director of the dining hall at different times and produced delicious home-cooked meals.

The servants, imbued with the same loyalty and devotion as the faculty, returned year after year. Among them were Kenneth, headwaiter, who rang the cowbell with a rhythm that awoke the hill at seven A. M.; Cora, the maid, who traveled all the way from New York each year to work on the hill; Pauline, the superb cook; and Henry, the handy man with the wooden leg and the cheerful smile; Perry Elijah, the blue gummed Negro, who could fix oil stoves, do plumbing, paint, build walls, repair clocks and, as times grew more modern, televisions.

As the school increased in size and scope, many of the students and their families rented houses at near-by Lake Summit, lived in boarding houses in Saluda or stayed at hotels and motels in Hendersonville, ten miles away.

In its 38 years of operation it is estimated that between three and four thousand doctors attended the sessions, some of them returning many times, as the program was varied each year. The students were from all of the South-

ern States, Pennsylvania, New Jersey, Ohio, New York, California and Oklahoma. There have been several foreign students, three Chinese, a German and one doctor from Saudi-Arabia, who made the trip to the United States expressly to attend the Seminar, having read about it in the Journal of the American Medical Association. Dr. Chien Chang Chen, one of the Chinese physicians, is now trying to organize a similar program in Formosa.

One day of each seminar was devoted to obstetrics, under Dr. Oren Moore's direction. Usually Dr. Moore had one other doctor to help lecture. However, one day he talked for six consecutive hours. When he had finished, there was a standing ovation for him, and the students wanted him to keep on talking!

In 1950 the Board of Directors decided to have an additional week devoted to Obstetrics and Gynecology and Dr. Moore was made Dean of the section. With the splendid assistance of Dr. James Donnelly of Raleigh, N. C., Vice-Dean, who later became Dean, this was most successful. Dr. Donnelly was followed by Dr. Robert A. ("Daddy") Ross of Chapel Hill, N. C. and Dr. J. Champneys Taylor of Jacksonville, Florida succeeded Dr. Ross as Dean of this section.

Members of the Ob., Gyn. faculty were:

Dr. J. Street Brewer, Roseboro, N. C.  
 Dr. Conrad Collins, New Orleans, La.  
 Dr. Ernest Franklin, Charlotte, N. C.  
 Dr. Robert Creadick, Durham, N. C.  
 Dr. R. B. Greenblatt, Augusta, Ga.  
 Dr. Richard Burt, Elkin, N. C.  
 Dr. Frank Lock, Winston-Salem, N. C.  
 Dr. J. Randolph Perdue, Miami Beach, Fla.  
 Dr. Waverly Payne, Newport News, Va.  
 Dr. Hudnall Ware, Jr., Richmond, Va.  
 Dr. William Barfield, Augusta, Ga.  
 Dr. James Wilson, Charleston, S. C.  
 Dr. A. W. Diddle, Knoxville, Tenn.  
 Dr. Lester A. Wilson, Jr., Charlottesville, Va.  
 Dr. William Black, Memphis, Tenn.  
 Dr. N. Thornton, Charlottesville, Va.  
 Dr. Lawrence L. Hester, Jr., Charleston, S. C.  
 Dr. Charles Thomas, Black Mountain, N. C.  
 Dr. Eric C. Schelin, Richmond, Va.  
 Dr. John Kight, Norfolk, Va.  
 Dr. John Ridley, Atlanta, Ga.  
 Dr. C. H. Mauzy, Winston Salem, N. C.  
 Dr. John Fish, Augusta, Ga.  
 Dr. John M. Fleming, Spartanburg, S. C.  
 Dr. John Parks, Washington, D. C.

Dr. Walter Thomas, Durham, N. C.  
 Dr. Bayard Carter, Durham, N. C.  
 Dr. Charles Flowers, Chapel Hill, N. C.  
 Dr. James Martin, Winston Salem, N. C.  
 Dr. John Nokes, Charlottesville, Va.  
 Dr. R. M. Ruck, Memphis, Tenn.  
 Dr. John Ashe, Charlotte, N. C.  
 Dr. W. Z. Bradford, Charlotte, N. C.  
 Dr. Trent Busby, Salisbury, N. C.  
 Dr. Hugh Hamilton, Kansas City, Mo.  
 Dr. Manly Hutchinson, Columbia, S. C.  
 Dr. Roy Parker, Durham, N. C.  
 Dr. Lewis Rattibun, Asheville, N. C.  
 Dr. John Saunders, Lynchburg, Va.  
 Dr. T. C. Stoudemayer, Greenville, S. C.  
 Dr. Washington Winn, Richmond, Va.  
 Dr. Jesse Caldwell, Gastonia, N. C.  
 Dr. Henry Fuller, Chapel Hill, N. C.  
 Dr. O. Hunter Jones, Charlotte, N. C.  
 Dr. John Robert Kernodle, Burlington, N. C.  
 Dr. Richard Pearse, Durham, N. C.  
 Dr. Arthur Summerlin, Raleigh, N. C.  
 Dr. John Woeltz, Charlotte, N. C.  
 Dr. Peter C. Graffagnino, Columbus, Ga.  
 Dr. Hugh McAllister, Lumberton, N. C.  
 Dr. John Monroe, Winston Salem, N. C.  
 Dr. Frank Whitacre, Nashville, Tenn.

At the request of the student body in 1954, it was decided to devote two days of each week of the Pediatric Section to Internal Medicine. Dr. Hugh Hussey of Washington, D. C. headed this section and did such an excellent job that he has since been made Dean of the Georgetown University Medical School! Dr. Eugene Stead, Professor of Medicine at Duke University succeeded Dr. Hussey in this office.

The Internal Medicine faculty follows:

Dr. Proctor Harvey, Washington, D. C.  
 Dr. Marcus Schaaf, Washington, D. C.  
 Dr. J. W. Quinlan, Rochester, N. Y.  
 Dr. Sol Katz, Washington, D. C.  
 Dr. James Moss, Alexandria, Va.  
 Dr. Edgar Davis, Georgetown Univ. Medical School, Washington, D. C.  
 Dr. Arthur Merrill, Emory Univ. Medical School, Atlanta, Ga.  
 Dr. David James, Atlanta, Ga.  
 Dr. Darrell Crain, Georgetown Univ. Medical School, Washington, D. C.  
 Dr. James Leonard, Washington, D. C.  
 Dr. William Parson, Charlottesville, Va.  
 Dr. James Respass, Charlottesville, Va.  
 Dr. John Verner, Durham, N. C.  
 Dr. Laurence Kyle, Washington, D. C.

In 1957 the name of the organization was

changed to the Southern Postgraduate Seminar.

The Seminar had its social aspects that relieved the work of the day. Two delightful events for years were the homemade peach ice cream party given by Mrs. Lesesne Smith at her home, "Tree-Tops," and the annual poker party with Dr. Smith as host, for the commercial representatives.

The weekly square dances were enjoyed by everyone from eight to eighty, though they were strenuous. It took several cups of Dr. Smith's famous grapefruit juice and alcohol punch to keep one going.

A picnic on Tryon Mountain was held for the students, faculty and their families each year, until the student body grew so large it could not be handled.

Fishing, boating, water-skiing and swimming at Dr. Lesesne Smith, Jr.'s private beach attracted many to the beautiful green waters of Lake Summit, three miles from Saluda.

The hour of relaxation for the faculty on the Smith's and Owings' porch before supper was a pleasant one. Much good medicine as well as "Jack Daniel" was absorbed as the blue shadows on Tryon Mountain grew longer and the breeze stirred the pine trees into life.

Other pediatric faculty and special lecturers were:

Dr. W. M. Kelsey, Winston Salem, N. C.  
Dr. Ralph Platou, New Orleans, La.  
Dr. Howard Stokes, Florence, S. C.  
Dr. J. R. Bowman, Johnson City, Tenn.  
Dr. William Reilly, Little Rock, Ark.  
Dr. Nash Herndon, Winston Salem, N. C.  
Dr. Frank Lamons, D.D.S., Atlanta, Ga.  
Dr. J. W. R. Norton, Raleigh, N. C.  
Dr. James Hughes, Memphis, Tenn.  
Dr. Helen Belding, Bowman Gray School of Medicine, Winston Salem, N. C.  
Dr. John Bender, Winston Salem, N. C.  
Dr. Lamar Callaway, Durham, N. C.  
Dr. William Crook, Jackson, Tenn.  
Dr. Samuel Elmore, Spartanburg, S. C.  
Dr. Mary Griffith, Bowman Gray School of Medicine, Winston Salem, N. C.  
Dr. Walter Klingman, Charlottesville, Va.  
Dr. Theodore Marrs, Montgomery, Ala.  
Dr. Robert Murphy, Hillsboro, N. C.  
Dr. Alexander Schaffer, Baltimore, Md.  
Dr. John Arthur Siegling, Charleston, S. C.  
Dr. John Cuttino, Charleston, S. C.  
Dr. H. R. Pratt-Thomas, Charleston, S. C.  
Dr. Hugh Carithers, Jacksonville, Fla.



DR. LESESNE SMITH

Dr. Claude Frazier, Asheville, N. C.  
Dr. Jerome Harris, Durham, N. C.  
Dr. William Kiser, Jr., Atlanta, Ga.  
Dr. Preston McLendon, Washington, D. C.  
Dr. Arthur Richardson, Atlanta, Ga.  
Dr. Wayne Rundles, Durham, N. C.  
Dr. Austin Smith, Chicago, Ill.  
Dr. Katherine Bain, Washington, D. C.  
Dr. Roger Bost, Fort Smith, Ark.  
Dr. Edward Curnen, Chapel Hill, N. C.  
Dr. Roger Howell, Chapel Hill, N. C.  
Dr. Arthur London, Durham, N. C.  
Dr. G. Foard McGinnes, New York, N. Y.  
Dr. Willard Mills, Greenville, S. C.  
Dr. Frank Stelling, Greenville, S. C.  
Mr. Donald Williamson, Spartanburg, S. C.  
Dr. William DeMaria, Durham, N. C.  
Dr. Jack C. Norris, Atlanta, Ga.  
Dr. Joseph Waring, Charleston, S. C.  
Dr. McLemore Birdsong, Charlottesville, Va.  
Dr. William DeLoache, Greenville, S. C.  
Dr. David Hawkins, Chapel Hill, N. C.  
Dr. Fletcher Raiford, Hendersonville, N. C.  
Dr. Paul Reque, Birmingham, Ala.  
Dr. Walter Scott, Jr., Birmingham, Ala.  
Dr. Clyde Wells, Sr., D.D.S., Spartanburg, S. C.  
Dr. Charles Dale, Spartanburg, S. C.  
Dr. Walter Moore Hart, Florence, S. C.  
Dr. James W. Jervy, Greenville, S. C.  
Dr. Amos Johnson, Garland, N. C.  
Dr. Nelson Ordway, New Haven, Conn.  
Dr. Richard Proctor, Winston Salem, N. C.



Dr. Arthur Weiss, Spartanburg, S. C.  
 Dr. William Peete, Durham, N. C.  
 Dr. Thomas Sappington, Thomaston, Ga.  
 Dr. C. Harrison Snyder, New Orleans, La.  
 Dr. Blair Batson, Jackson, Miss.  
 Dr. Edward Cardwell, Columbia, S. C.  
 Dr. Doris Howell, Durham, N. C.  
 Dr. William Donald, Birmingham, Ala.  
 Dr. R. J. Hursey, D.D.S., Spartanburg, S. C.  
 Dr. Frank Mullins, Augusta, Ga.  
 Dr. Eugene Regen, Nashville, Tenn.  
 Dr. Judson Van Wyk, Chapel Hill, N. C.  
 Dr. Victor Vaughan, III, Augusta, Ga.  
 Dr. Lawson Wilkins, Baltimore, Md.  
 Dr. E. A. Branch, D.D.S., Raleigh, N. C.

The small white and green cottages emerging from the trees around the hill were all named. One was called "The Bull Pen," as the students who came without their families were lodged there, but this name shocked Miss Hattie Staton, Dr. Smith's faithful secretary, and she would never use it; instead she referred to it properly as "Ingleside." Many "bull sessions" were held late at night, while the students discussed some thrilling case, some especially interesting lecture or a revolutionary idea.

Dysentery was the great killer of babies in the 1930's. Then the sulfonamides were discovered and the first three cases reported in which the new drugs were used came from Saluda.

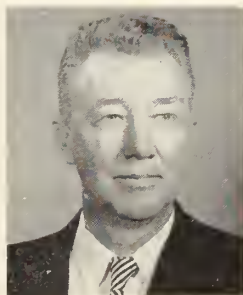
Dr. Smith did not believe in giving children calomel or teething powders, which were found to contain mercury. During a clinic one day at Saluda it was noted that aerodynia was found almost always among indigent children who used both calomel and teething powders in quantity. Could mercury be the cause?

Dr. Lee Bivings of Atlanta had given this possibility thought and suggested that these children whose bodies were saturated with mercury be relieved by the use of British Anti-Lewisite or BAL, the drug that was being used to treat heavy metal poison. A case was on hand in the hospital and Dr. Bivings' suggested treatment was begun. Dr. Josef Warkany of Cincinnati confirmed mercury as a cause of aerodynia by examining specimens of urine. Thus, it was through one of the Seminar discussions that the cause and treatment of one of childhood's plagues was solved.

Many people, on hearing about the Seminar

for the first time, inquired, "Who subsidizes it?" Aside from a nominal registration fee, the only source of income the Seminar had was derived from the fees paid by the commercial houses to exhibit their products. Stevens Hall, the sawdust-floored building, named for one of the representatives, Mr. E. M. Stevens of Evanston, Ill., was not only a place of business but a club, and many an exciting bridge and checker game went on there while the lecturers were speaking in Cornell Hall. Mr. Joe Gilmore and Mr. E. F. Johnson helped indoctrinate the other detail men when they first arrived on the hill.

In the 1930's the Commonwealth Fund gave two thousand dollars to be used in paying the expenses of doctors over forty-one years of age who practiced in towns of 1000 to 2000



DR. LESESNE SMITH, JR.

population. These scholarships were a great help, as at that time there were no professional men as greatly loved and as poorly paid as the family doctor. This and one other \$500 grant from the Doris Duke Foundation in 1951 were the only financial aid the Seminar ever received.

Thirty-eight years ago, at the first session, Dr. Mulherin contributed the slogan which summed up the whole idea behind the Seminar — "Better Babies in the South."

In October of 1958 the Board of Directors met to discuss continuation of the school, as problems had arisen. With the closing of the Spartanburg Baby Hospital clinical material was no longer as readily available. Pediatrics is now adequately covered in all medical schools, and physicians get a great deal of scientific information at ever increasing medical meetings. Facilities on Smith Hill and in Saluda had not kept up with the popular de-

mand for both comfort and luxury. The general practitioners, since organizing their Academy, have taken over their own educational program and are to be congratulated on the splendid job they are doing. In view of these and other factors, the Board decided with great regret, to discontinue operation.

The faculty and those who made the Seminar possible will always be remembered

gratefully by the students and thousands of children in the South who benefited from the knowledge so graciously given at Saluda, the sleepy little mountain town. With a professional spirit and pure altruism without parallel in the medical world today, these men not only paid their own traveling expenses, but gave their time and effort to the diffusion of knowledge of sick children.

---

*Traumatic rupture of the spleen associated with portal cirrhosis, portal hypertension, and congestive splenomegaly.* Joseph Hodge, M. D. (Spartanburg). Am. Surgeon, 25, 214, April, 1959.

Many factors have been implicated in producing traumatic spontaneous, or delayed rupture of the spleen. Delayed rupture of the spleen in a 40-year old man with portal cirrhosis, portal hypertension and congested splenomegaly occurred following a blow to the left upper abdomen.

He complained of diffuse, sharp, generalized, abdominal pain which became localized to the left hypochondrium and was associated with pain in the left shoulder (positive Kehr's sign). He showed generalized abdominal tenderness especially in the left upper quadrant with rebound tenderness. The liver and spleen were enlarged. Liver function studies

disclosed minimal hepatic dysfunction and there was anemia and thrombocytopenia. Serial scout films of the abdomen demonstrated progressive enlargement of the splenic shadow. Upper gastrointestinal barium studies showed serrations along the greater curvature and displacement of the stomach and small intestines, but no evidence of esophageal varices. Fourteen days following trauma, splenectomy was successfully performed for a large subcapsular hematoma of the spleen with hemoperitoneum.

At operation there was found severe Laennec cirrhosis of the liver and portal hypertension, yet liver function studies were relatively normal.

Splenectomy is the treatment of choice in all cases of subcapsular hematoma with spontaneous or delayed rupture of the spleen.



# THE GREENVILLE COUNTY MEDICAL SOCIETY

## HISTORICAL SKETCHES

### I. ANTECEDENTS

J. DECHERD GUESS, M. D.  
Greenville, S. C.

This is the first of a series of articles, adapted from the book *A Medical History of Greenville, South Carolina*, written by the same author, and which will be published by the Greenville County Medical Society in 1959.

The historical story of the Greenville County Medical Society begins in 1670, more than 200 years before the society was chartered, and more than a century before the post-Revolutionary War village of Greenville came to be.

In that year a group of settlers from England and the Barbados established Charles Town. With them came, no doubt, some rudiments of British medical knowledge. There may well have been one or more persons with a bit of medical skill in practice. However, there certainly was no organized medical effort, and there was probably no truly practicing physician in this early day.

However, before the middle of the eighteenth century there had come to be in Charleston a group of brilliant physicians. These men were reading and writing medicine. They were recording medical observations, and they were actively exchanging ideas with medical leaders in Europe.

The first evidence of any medical organization in the colony is a reference to a "Faculty of Physic" in Charleston in 1755. At this time there were still only a few small settlements other than Charleston within the area.

The first medical society in South Carolina was organized in Charleston in 1789. There were ten founding members. Dr. Peter Fays-soux was its first president. The society was intended to include in its membership doctors from throughout the state. A provision was made for "county members." In 1794, this first society was chartered by the state's General Assembly. It was named the Medical Society of South Carolina. With a beginning in Charleston, but by name and by intent state-

wide in its membership, this society was the progenitor of the South Carolina Medical Association. It was distinguished from the State Association in name only for many years after organization of the latter.

The South Carolina Medical Association was organized in 1848. The Medical Society of South Carolina then became a constituent district, or county, society of the State Association. This it continued to be until 1952, when the Charleston County Medical Society was organized. The Medical Society of South Carolina then surrendered its charter as a constituent society of the State Association, and the new Charleston County Society was duly chartered to be the constituent society for Charleston County.

The Medical Society of South Carolina was not liquidated by any means. It has continued its corporate life as still another of the old historical organizations which live on forever in Charleston. It has, however, a more utilitarian reason for continuing. It has been and continues to be the administrator and trustee for certain legacies, the funds from which were used to establish and which still help maintain Roper Hospital.

When the State Association was organized in 1848, the roads of the state were poor, traversing, as they did, sands, swamps, and rivers. Steam boats operated from Charleston to Savannah, to Augusta, to Georgetown, to Cheraw, and to Columbia when the conditions of the canals permitted. The railroad from Charleston to Hamburg, across the Savannah River from Augusta, was completed in 1833. It was extended 15 years later from Branchville to Columbia and from Kingville to Camden.

At the organizational meeting of the State Association, neither Greenville, Spartanburg,



Pickens, Oconee, nor Laurens counties was represented. At that time, there were only two doctors in Greenville district, as the counties were called from 1800 to 1868. These doctors were "diplomated" but not licensed. Pickens district had two, Laurens had 25, and Abbeville had 64. In Abbeville, twenty doctors met to select delegates and to pass resolutions to send to the organizational meeting in Charleston.

It was estimated in 1852 that there were between 900 and 1,000 doctors in South Carolina. Their qualifications were most variable and were often highly questionable.

The South Carolina Medical Association became inactive during the Civil War but was reorganized in 1869. At the annual meeting in 1873, delegates from Greenville County were registered for the first time. This was twenty years before the Greenville County Society was chartered. The annual convention of the State Association was held in Spartanburg in 1882. The Greenville County Society received its charter as a constituent society of the State Association in 1891.

In explanation of the seemingly late organization of the Greenville County group as a medical society, an important fact should be borne in mind. Population spread in South Carolina was by two chief routes. It either moved inward from the coastal area or it moved down from Pennsylvania through Virginia or North Carolina into the region of the Waxhaws. The state was almost wholly agricultural, and the rich, sandy loam of the coastal plain was better adapted to agriculture than were the red clay hills of the Piedmont.

The northwest corner of the state—the area which now makes up Greenville, Pickens, Oconee, and Anderson Counties—was either a part of the Cherokee Nation lands or bordered on them. The area comprising Greenville County remained recognized Cherokee land until after the American Revolution. After it was opened up for settlement in 1784, the density of population increased very slowly.

The Spartanburg area was settled largely from Virginia and North Carolina much earlier than either Greenville or Pendleton districts. The Pendleton district included what is

now Anderson, Pickens, and Oconee counties. The Spartanburg County Medical Society had been organized in 1866. At that time, there were seven physicians living within the village. The Pickens County Society was organized in 1891, the same year the Greenville Society received its charter. The Oconee Society was not chartered until 1903.

Some ten years before the beginning of the Revolution, Colonel Richard Pearis, his Cherokee wife, and their children established a trading station at the falls of the Reedy River, where Camperdown Mill did stand in the city of Greenville. Colonel Pearis came from Ireland. He had settled first in Virginia and had moved from Virginia to this area. In addition to the trading station, he operated a grist mill and a saw mill. By barter from the Cherokees, he acquired about ten square miles of land on either side of the Reedy River. Paris Mountain was his and seems to have been named for him. The name Paris was probably a corruption of the word Pearis.

Pearis lived in a large, two storied log house. He cultivated about 100 acres of land. He raised English pure bred race horses, hogs, sheep, and cattle. His orchards contained apples, peaches, and plums. He was a highly successful and a wealthy man. There was no white community around his station, and he had no near neighbors.

During the Revolution, Colonel Pearis and his sons became ardent and ruthless Tories. The American patriots captured and destroyed his settlement. When the Tory cause appeared to be doomed to failure, Pearis fled with his family to the West Indies, where he remained until his death.

After the Revolution, all of what is now Greenville County was acquired by the state from the Indians by negotiation or purchase. The state then gave the territory formerly controlled by Pearis to Lemuel J. Alston. Alston held the land until 1815, when he sold his entire holdings, including 1028 acres of land, to Vardry McBee who had come down from North Carolina. This land included and surrounded the present site of the city of Greenville.

The village, which had grown up at the former site of Pearis' trading station, was called

Pleasantburg by Mr. Alston. He had a plat of the village made in 1785. This map was recorded in 1798. On the map, the streets and a court house square were laid out and were dedicated by Alston to the public use.

What was later to become Greenville County was opened up for settlement in 1784. Within two years practically all of the desirable land had been taken up. Most of the settlers were Revolutionary War soldiers. It seems that the name of the village was changed from Pleasantburg to Greenville between 1798 and 1807. In 1790, the population of the county was about 5,000. In 1800, it was 11,500, and this included free negroes and negro slaves.

After visiting the village of Greenville in 1806, Edward Hooker recorded in his diary:

"The situation and aspect of the village is quite pretty and rural; the streets covered with green grass and handsome trees growing here and there . . . but there is a want of good houses, the building mostly of logs . . . The place is thought by many to be as healthy as any part of the United States, not a seat of much business . . . One or two physicians in or near the village, but their practice is mostly at the Golden Grove, a fertile but unhealthy settlement ten miles below. One clergyman within six or seven miles, who preaches at the court house once in three or four weeks."

A Doctor Hunter ran for Congress shortly after Mr. Hooker's visit to Greenville in 1806. His opponents said of him, "Hunter is such a good physician that he cannot be spared to go to Congress." That opinion seems to have prevailed. Dr. Hunter was not elected.

In 1822 the village had a population of 400. There were two schools, the Greenville Male Academy and a Female Academy.

The first church inside the city was St. James Mission, begun in 1821. This later became Christ Episcopal Church. Baptists organized in Greenville in 1821 with a membership of "one male and nine females." This ratio of men to women seems to have been about the usual one in the earlier churches. Town churches were usually organized by rural congregations in the neighboring countryside. The rural churches did not move into the villages but continued their identity.

A Baptist church was built on the present site of the First Baptist Church in 1827. The funds to build were raised by public subscription.

By 1824, Greenville had already begun to establish itself as a health resort. David Long had opened a resort hotel, and Mr. Toney had completed the Mansion House. The latter was torn down to make room for the Poinsett Hotel about 100 years later. The Mansion House rapidly became famous as a fine hotel.

In 1827, *The Republican* published an editorial which praised Greenville as a summer resort for "our low country friends whom the fever and musquators (sic) drive from their homes during the summer." The editorial referred to "the spacious hotels and boarding houses." Boasting of the professional and mechanical opportunities, it said: "All get employment but the doctors—we have little use for them." It boasted that the town during the summers was crowded with "strangers and invalids" from the low country.

In 1824, Robert Mills, the famous architect of the period, in his "Statistics of South Carolina" wrote of Greenville:

"It (Greenville) is the resort of much company in the summer and several respectable and wealthy families have located themselves here on account of the salubrity of the climate . . . It has been preferred as a residence to Pendleton, perhaps, on account of its not being affected so immediately by the cold damp of the mountains . . . The public buildings (include) a Baptist meeting house, an Episcopal church, and two neat buildings for the Male and Female Academy . . . The number of the houses is about seventy, the population about 500." The population of the county was about 15,000 at this time. In 1830, there was a county population of 16,481. There were 11,385 whites, 32 free negroes, and 5,064 negro slaves.

Greenville was an unincorporated settlement or village until 1831, when it became an incorporated town. By 1836, the population had increased to about 1,000. There were at that time five physicians living in or near the town. The first of these was Dr. Richard Harrison. He had come in 1831, shortly before the town was incorporated. Nothing more than the fact of his coming and that he was an uncle of Dr.

James Harrison seems to be known about him.

A more prominent doctor of this early period was Dr. Andrew Barry Crook. He was born in 1802 and lived until 1862.

The Presbyterians organized a church in Greenville in 1848. Furman University was established and the old "tower" building was built on the present old campus in 1852.

Nullification, secession, and war were already in the offing. Young Benjamin F. Perry came to Greenville in 1824. He was destined to make a tremendously increasing impact on the thought and attitude of the community during the next fifty years. Under his able and vigorous leadership, Greenville County fought strenuously against the forces leading toward war.

During Perry's early years, Greenville had been making rapid strides as a trading center and as a summer resort. The State road had been completed from Greenville through the Saluda mountain gap into North Carolina. This road furnished an excellent route to cattle drovers to move their herds from the west to Charleston and Augusta. More than 50,000 hogs, and a proportionate number of horses, mules, cattle, and sheep were driven

through Greenville during a winter. This movement of live stock afforded a fine market for grain and for garden truck.

Reference has already been made to Perry's congenial and able companion, Dr. A. B. Crook. Crook was a man of vigorous intellect, but his blunt-spoken and impulsive nature made him many enemies. Although Crook and Perry often disagreed, especially on political matters, they remained life long and close friends.

Perry fought strenuously against the forces leading to war. He bitterly opposed nullification and later secession. Between the conflict over nullification and the secession movement in 1850, there was a peaceful interval. During this time, Greenville prospered both as a summer resort and as an industrial town. By 1850, its permanent population was about 1,500. Many low country summer residents bought homes in or near the town. Although rural in general appearance, it was becoming more city-like, and it was becoming more refined and its people more sophisticated. Some culture was being absorbed from the summer visitors and society was becoming more formal and more stratified.

---

*Vibrapuncture treatment of creeping eruption.* John van de Erve (Charleston). A. M. A. Arch. Dermat. 79:101, Jan. 1959.

For many years, various methods of destructive nature have been used in an effort to kill the larvae of creeping eruption to relieve the intense pruritus of this condition. Dry ice or ethyl chloride spray is the common method of treatment.

No internal medication is of value in this condition except for palliation of the itching.

The author suggests the use of the Conway Dermajector (vibrating multiple needles) to thoroughly criss-cross the infested skin. This kills the multicellular larva without scarring the skin itself. Hydrocortisone solution may be driven into the skin with the needles. The treatment may be repeated as needed since the larvae are not always killed the first time.

(Authors abstract)

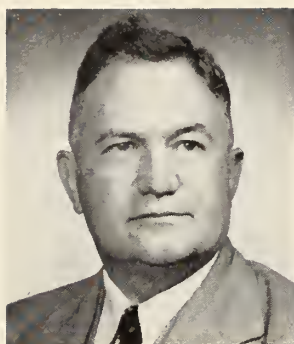
---

*Tracheostomy for respiratory muscle failure in infants and children,* by R. R. Bradham and J. R. Paul,

Jr. Am. Surgeon 25:242-247, Apr. 1959.

Attention is focused on the improvement in respiratory function brought about by tracheostomy in infants and young children when there is respiratory muscle failure. The effects of drying secretions, progressive loss of function of respiratory effort, hypoxia, and hypercapnia with its associated toxemia are described. The signs and symptoms of progressive reduction of respiratory function are cited. Four cases are presented in which tracheostomy was believed to be life saving as it facilitated the removal of secretions from the lower respiratory passages and reduced the respiratory tract dead space and resistance to air flow in the trachea. Important steps in the technique of tracheostomy that are applicable to the infant and child and the many and complex problems encountered in maintaining an adequate airway in the small trachea following a tracheostomy are discussed. Complications can be reduced to a minimum if tracheostomy is carried out under well controlled conditions and the principles of good tracheostomy care are followed.





## PRESIDENT'S PAGE

Once upon a time you crept, crawled, stood, then ran. Civilization has followed just such footsteps and our comfortable mode of living and travel is caused by the marvelous scientific discoveries. Our progress depends on the putting together by the artist the projection of the scientists. The archaeologists have shown the various stages of the ages which man has experienced, such as paleolithic, neolithic, etc.

What has the scientist discovered which is any greater benefit to mankind than a state of well being and longer life? The rocking chair age is enjoyed by most who have passed 65 years of age in a pleasant, comfortable, and respectable manner.

We in South Carolina have been looking at the sun, moon, and stars, but seldom have focused our attention on the ground. It is here that we get our start, and our growth depends on what the soil produces. It was 31 years ago the South Carolina Research Food Commission was set up. The reason was the discovery of minerals rich — yes, very rich in our soils. Fortunately the iodine content which was so badly needed and wanted by peoples in the goiter areas of the United States, and the world, has proved to be in abundance in our soil, which is transferred to what we grow.

Yet it became defunct, and only a few know the reason why, but let's not dig up old skeletons, as they only rattle. Let's go to work and revive our South Carolina Food Research Commission, so that we not only show the world we have a tag with the wonderful Iodine State, but that we have the contents that produce exceptionally good human species, which is good for animals, especially horses, as well as for man.

Remember, Africa has its diamonds, the margins of the ocean its oysters and pearls, Texas and Pennsylvania their oil, Nevada its copper, California its gold, but South Carolina has the human touch with iodine in its soil.

The source of the iodine is from the igneous granite of the Blue Ridge Mountains and not the ocean.

Let the people of South Carolina know where our riches lie, do not bury it, but make it active and alive.

William Weston, Jr., M. D.

# Editorials

---

## THE SALUDA SEMINAR

After many years of most valuable service to the practitioners of South Carolina and many other areas, the Saluda Seminar has closed its doors. Conceived by the late Dr. D. Lesesne Smith as a means of spreading knowledge of pediatrics to the people who handled the great bulk of children, that is, the general practitioner, it served an invaluable purpose of helping to reduce the high mortality among children in South Carolina particularly. Consisting of an unpaid group of volunteer lecturers, and conducted in its detail by Dr. Smith and his family, its faculty made available to many people who would not travel long distances an up-to-date course in practical pediatrics. In its later years obstetrics was added to the curriculum, and finally, internal medicine, but the Seminar remained essentially a pediatric seminar throughout its life.

Changing fashions in medical meetings, and the great increase in post-graduate courses and special facilities for refreshing the knowledge of the practitioner have diminished to a great extent the need for the Seminar. Its management had become somewhat more difficult than it had been in the past, and finally and regretfully, its Faculty decided to abandon the activity.

The Seminar was an excellent and productive effort which was a product of Dr. Smith's conviction and enthusiasm. It offered in its time a unique arrangement for a combination of learning and relaxing. The many physicians who have attended it over its career will feel regret that it is no longer available for them or for their colleagues, but times have changed, and we can only offer a tribute to the work and accomplishment of the past years.

In this issue there appears an account of the Seminar written by Dr. Lesesne Smith's daughter-in-law, who has been most familiar with the workings of Saluda, and most sympa-

thetic with the activities. We recommend it as good reading, and an excellent exposition of the spirit and soul of the career of the Saluda Seminar.

---

## TUBERCULOSIS STILL A PROBLEM

It is unfortunate that many of us are inclined to accept without much analysis the statements and figures which appear from time to time in the public press as well as in the medical journals about the status of tuberculosis as a public health and personal problem. After the development of chemotherapy for tuberculosis and the encouraging results reported, many of us began to look on tuberculosis as a disease which had been conquered, or was in a very vulnerable position for eradication. There was even talk in some quarters about the lack of continuation of special facilities for caring for tuberculous patients, and Boards of authority cast around for possible new use for old buildings which had been devoted to the treatment of a disease thought to be on the way to disappearance.

As with most diseases when new treatments appear to be extremely promising, and even prove so, we are probably very premature in making statements that the disease is headed for oblivion. Certainly tuberculosis is far from being a vanquished foe. The handsome and enlightening Annual Report of the South Carolina Tuberculosis Association presents some facts which are of vital interest to all of us who are concerned with public health and with tuberculosis particularly. It shows, for instance, that there are more tuberculous cases under Health Department supervision in June of 1958 than there were in June of 1955. It shows that while the deaths declined from 280 in 1954 to 189 in 1957, there were still reported almost as many new cases in the later year as at the earlier date. There were 822 patients in county and state sanatoria in 1958 as compared with 780 cases in 1955. In

South Carolina there are 6,099 persons with tuberculosis under Health Department supervision.

Apparently South Carolinians have not been lulled into apathy by some of the over-enthusiastic reports which have appeared from time to time, for their donations to the Christmas Seal Sale were greater in 1958 than in 1957. The necessity for further and better support of this extremely valuable fund-raising project is obvious in view of the figures given above. Mass screening programs, grants for research, refresher courses, workshops, and the like must be supported to carry on the fight against a disease which is still one of our great killers.

---

#### DANCING MANIA OR DANCING MANIACS?

According to a release from the Southern Regional Education Board, one of the ladies from the South Carolina State Hospital in Columbia, who is Assistant Director of Music Therapy, has received a Training Grant from the Board and with the assistance derived from this grant will visit several hospitals "to observe and participate in dance and music therapy . . ."

It seems that almost any kind of therapy may be good for the mentally disturbed, and if the older forms of dancing were used for such a purpose, it would be easy to see how an excited patient might be calmed into rhythmic quietude. But suppose the therapy is used with the current variety of dance which is seen among the young. Would it be possible that a patient could be anything but made a little more disturbed by the rocks and rolls and innumerable other popular gyrations? Somehow the dancing mania of the Middle Ages comes to mind. How does that phenomenon tie up with current dance therapy?

---

#### CIBA AND THE MEDICAL LETTER

In an earlier issue *The Medical Letter* was mentioned as a promising source of accurate information on currently produced drug preparations. The Medical Letter has been very outspoken, and it would seem almost inevitable that somebody would take offense, whatever the justification might be. The in-

evitable has happened. Ciba Pharmaceutical Products has sent to an (unknown) mailing list a reprint from *The Medical News* of May 27, 1959, in which the statement is made in a very spirited and resentful way of certain reports which the Letter had made on the product Singoserp. Indeed Ciba's President doubts "seriously . . . whether your publication is either intended or equipped to perform this critical function" (that is, of giving unbiased, reliable and timely information on new drugs).

This Journal is not in a position to judge of the merits of the claims made for the drug or the criticisms made by the *Letter*. However, it does seem rather a pity that what was no doubt intended as an unbiased report should have drawn such critical and abusive remarks from the manufacturer of the product.

---

#### HIRING THE HELP

Many a successful man in medicine, successful both in a medical and financial way, had to scratch and scrape to secure his medical education. No doubt most of them, if they desired to pursue specialized studies, had to make personal sacrifices which they justified by the pleasure, and perhaps profit, which would come from acquisition of special knowledge and skill. Probably many a physician had to forego his ambition for such pursuits because his family affairs and expenses would not permit him to spend what was required for the purpose.

Life appears to be somewhat easier for some of our members, now that the common availability of stipends and grants has become generally considered as more or less matter of course. In certain specialized fields it has apparently become necessary to dangle a fairly juicy bait before the reluctant candidates, and the sums of money which are available sound rather astonishing to those who think of the old hard times. Intent on luring proper candidates into certain fields in which personnel is scarce, the Public Health Service is now making available traineeship awards which carry on for nine to twelve months, and may be renewed up to periods of five years. There is no fixed amount offered, but a circular from the Service states that "such sti-



pends may range from \$6,500 to \$17,500 a year". Oh lucky candidate who can snap up the latter figure! With a financially carefree mind he can pursue the object of his scientific affection and not have to worry about Junior's tuition or the five or six square meals which he may enjoy with such backing. Probably this is an excellent way to attract the desired talent. How far it can go is a question which eventually comes back to the taxpayer and our own pockets.

### **THE SCHOOL HEALTH COMMITTEE OF THE SOUTH CAROLINA MEDICAL ASSOCIATION**

The School Health Committee is a committee appointed by the President of the South Carolina Medical Association, consisting of several doctors from various parts of the state who have special interests in the problems of school health, and Dr. Hilla Sheriff ex officio, who is the director of the Maternal and Child Health Division of the State Board of Health.

The South Carolina Medical Association is the official organization of the medical profession in the State of South Carolina, and it is made up of delegates from each of the counties' medical organizations. The County Medical Societies are local societies composed of all the doctors of medicine in the community who belong to the American Medical Association.

*Objectives and functions of the School Health Committee of the South Carolina Medical Association.*

The reason for existence of the School Health Committee is to permit the practicing physicians of the state to participate in the plans for, and the practice of school health policies in the schools of the state. In this connection, the committee has four basic spheres of activity.

1. The members of the committee strive to familiarize themselves with modern trends in school health practices nationally, and then to formulate ideas and plans about school health which will be applicable to the problems of the schools of the State of South Carolina.

2. The School Health Committee of the South Carolina Medical Association is available to act as an advisory body to the State Board of Health, the State Department of Education, the State Parent-Teachers Association, and any other agency which requests its opinions on matters concerned with the participation of the medical profession in school health practices.

3. The committee has the duty of informing the members of the medical profession of the problems of the states' schools, and the agencies serving them.

4. Promotion and fostering organization of local School Health Committees in each County Medical Society.

Since its organization in 1955, the School Health Committee has realized that it could not accomplish anything on a state level which would be of any particular value to the individual schools or school children.

The health problems of city schools and those of rural schools are entirely different, and the health problems of schools serving largely indigent or perhaps colored populations are also entirely different from those of schools serving middle class or well to do communities. For these reasons it is not practical for the School Health Committee to make any more than bare minimum suggestions about specific school health policies. The School Health Committee has, therefore, urged the establishment of School Health Committees in each of the county medical societies, composed of one or more physicians in the community who have special interest in school health problems.

These local School Health Committees are encouraged to meet from time to time with local educators and parent groups to make plans for establishment of school health policies and practices in their communities.

The local School Health Committees also have the duty of informing themselves about school health practices in general, and interpreting these to the other members of the local medical society, so that all physicians will be familiar with and sympathetic with the individuals and agencies who are attempting to improve the health of school children by carrying out the plans which have been formulated.

School Health Committees do not attempt to actually perform medical services for the schools, but encourage the use of private practitioners for periodic health evaluations and treatment of children. Where there are actually indigent students, the use of clinics for evaluation of individual children on appointment basis is encouraged.

*Method of operation of the School Health Committee of the South Carolina Medical Association.*

1. The committee meets several times each year to discuss and advise in response to needs that become apparent. Individual members of the committee also serve as speakers and health advisors as spokesmen of organized medicine.

2. The chairman of the committee submits an annual report to the meeting of the House of Delegates of the South Carolina Medical Association, which is published each year in the *Journal of the South Carolina Medical Association*.

3. The committee, with the financial assistance of the Division of Maternal and Child Health of the State Board of Health holds an annual conference of County School Health Committees for discussion of common problems.



CLAY W. EVATT, M. D.

Clay W. Evatt, of Charleston, new Vice-President was born in Anderson County, S. C. His pre-medical work was at the University of South Carolina. M. D. —Medical College of Va., Richmond, Va. 1924. He did post graduate work in Richmond, New York, Brooklyn, and Chicago. He is a graduate of Trudeau School for Tuberculosis. His affiliations are numerous and bespeak an active interest in medical affairs. He is a member of Phi-Chi Medical Fraternity; Associate Professor of Ophthalmology, Medical College of S. C.; Fellow of American College of Surgeons; Fellow of International College of Surgeons; Fellow of American Academy of Ophthalmology & Otolaryngology; on the Board of Directors of Baker Hospital; Widows and Orphans Society; Ophthalmologist to the Charleston County Assn. for the Blind; Past President of the S. C. Eye, Ear, Nose & Throat Society; President of the Charleston County Board of Health. He is listed in "Who's Important in American Medicine". He belongs to the Pan-American Society of Ophthalmology and is Past President of the Industrial Medical Society of S. C.

He was in general practice in Greenville, S. C. for 10 years. With Miss Mamie Oetzel, he started the first Tuberculosis Clinic in South Carolina for colored people. He was Director of the Junior Chamber of Commerce, Vice President of the Greenville County Medical Society and President of the Reserve Officers

Association. He belongs to numerous social, religious, and educational organizations.

---

## NEWS

---

### SOUTH CAROLINA PEDIATRIC SOCIETY

At the meeting of the South Carolina Pediatric Society held in Columbia at the time of the meeting of the state Association, the following nominations were made for officers for the coming year: Dr. Charles Zemp for President; Dr. Kenneth Herbert for Vice President; and Dr. Caspar Wiggins for Secretary. Dr. W. M. Hart, Dr. Fred Adams, and Dr. Jack Rheney were named as members of the Child Health Committee of the South Carolina Medical Association.

The Annual Scientific Meeting of the Society will be held in Columbia on September 14 and 15. The program is not yet completed, but there will be addresses by Dr. Jerome Harris of Duke University, and Dr. Kenneth Aycock of Columbia. The latter will speak on the "Co-existence of Sickle Cell Anemia, and Rheumatic Heart Disease."

---

Dr. Paul Garrison, formerly of Greenwood, S. C., participated in the presentation of the scientific exhibit "Ear Surgery in 3-D", which received the Billings Gold medal at the A.M.A. in Atlantic City. The exhibit was prepared by J. Brown Farrior, M. D. Recently, Dr. Farrior presented a synopsis of this work as guest speaker at the meeting of the South Carolina Medical Society in Columbia.

Dr. Garrison is now Resident in otolaryngology at the Tampa General Hospital and plans to return to Greenwood.

---

The Mid-Atlantic Meeting of the International College of Surgeons will be held at Homestead Hotel, Hot Springs, Virginia on November 16, 17 and 18th. The profession is cordially invited to attend.

---

Dr. John E. Zeliff, Greenville, has been certified by the American Board of Pediatrics.

---

John P. Manos, M. D. announces the opening of his office in the general practice of medicine at St. Andrews Center, 1051 Savannah Highway, Charleston.

---

Seventy-five per cent of the population in the Northwest part of the United States carries insurance against hospital costs, Health Information Foundation states. Comparable percentages for the other sections are 68 for the West, 67 for the North Central, and 55 per cent for the South.



FRANK C. OWENS, M. D.

*Alternate Delegate to the A. M. A.*

Doctor Owens was born in Richland County, attended the Columbia City Schools, graduated from the University of South Carolina with a B. S. degree. He then entered the Medical College of the State of South Carolina where he received his M. D. degree in 1923. He interned at the South Carolina Baptist Hospital, after which he began the practice of medicine in Columbia.

In 1942, he entered the Medical Corps of the Air Force as Captain, and was discharged 3½ years later as a Lt. Col. He was elected Mayor of Columbia upon his return and served four years. He is now practicing medicine in the city of Columbia.

Doctor Owens has served in the capacity of President of the Lions Club, as State Chairman of the Infantile Paralysis Organization, as State Chairman of the Heart Association Drive. While Mayor, he was President of the S. C. Municipal Association, and a member of the National Board of Directors. Dr. Owens served as President of the Columbia Medical Society, and as President of the Columbia Art Association. Doctor Owens was twice delegate to the National Democratic Convention, served as President of the South Carolina Industrial Medical Society, and is former President of the A. C. Moore Parent Teachers Association. He was appointed State Chairman of the Medical Advisory Committee to Selective Service, and has served in that capacity since its inception. He is at present Chairman of the Committee on Legislation and Public Policy of the South Carolina Medical Association. Doctor Owens was elected a member of the Executive Committee of the South Carolina State Board of Health and serves there in the capacity of Vice Chairman and Secretary. He is a member of the South Carolina Water Pollution Board. He is former President of the Columbia Medical Club, a member of the National Association of Food Research, a member of the Forum Club. Doctor Owens is a Shriner, Mason, Elk, and is a member of the American Legion and of the 40 and 8. He is a member of the Staff at the Columbia Hospital, the Providence Hospital, and the South Carolina Baptist Hospital, and

he is presently serving as Secretary of the Providence Hospital Staff. Doctor Owens is a member of the Medical Board of the South Carolina Retirement System. He is an Episcopalian, and is a member of the Trinity Episcopal Church.



WILLIAM LOUIS PERRY

William Louis Perry, newly elected member of Council was born January 4, 1912 in Chesterfield, S. C.

He graduated from Chesterfield High School in 1929 and received his B. S. at Wake Forest, 1934, his B. S., Medicine, Wake Forest, 1936, his M. D., Medical College of South Carolina, 1938.

He was an intern at McLeod Infirmary, Florence, South Carolina and has been in general practice in Chesterfield since 1940. He is Past President of Chesterfield County Medical Association, and was President, Pee Dee Medical Association in 1957.

Dr. John C. Bonner, Charleston, has been made a Fellow of the American Academy of Pediatrics.

Dr. P. M. Temples has located in Woodruff and will have his office at 230 West Peachtree St.

He is a graduate of the Medical College in Augusta, Ga. and was connected with the Medical College of South Carolina for some time before moving to Spartanburg to become Clinical Director of Laboratories of the Spartanburg General hospital. Later he entered private practice and was director of the Spartanburg County T. B. Hospital.

From 1944 to 1951 he served as director of the Spartanburg County T. B. Control Program and supervised chest clinics at the County Health Department. He left Spartanburg in 1951 and served as assistant medical director at a T. B. Hospital in Kentucky, and as a specialist on the Veterans Regional rating board at Roanoke, Va. He returned to Spartanburg to enter private practice and from there moved to Woodruff.



## POISON CONTROL CENTERS

A new Poison Control Center has been set up by the Pediatric Department of the Medical College of South Carolina. The prime purpose of this center is to supply information to physicians regarding chemical composition, potential toxicity and therapy of poisoning by the limitless number of household products surrounding the average family. In addition to reference materials purchased for the center by the Maternal and Child Health Division of the State Board of Health consultation services are available from the Department of Biochemistry and Pharmacology and the School of Pharmacy of the Medical College as well as from a botanist and entomologist.

As you have been previously notified there is also a Poison Control Center located at the Columbia Hospital's Emergency Room, Columbia, South Carolina. Physicians desiring poison control information may call either of these centers:

Roper Hospital, Raymond 2-7711, Extension 70, Charleston

Columbia Hospital Emergency Room, Alpine 4-7382, Columbia.

Unfortunately due to lack of funds, all telephone calls will have to be paid by physicians requesting information or by the patient.

Forms concerning clinical and follow-up data on each case will be mailed for completion to physicians receiving information. These completed forms will be sent by the Poison Control Centers to the National Clearinghouse for Poison Control Centers, Washington, D. C., for tabulation and analysis.

Margaret Q. Jenkins, M. D.

Director, Poison Control Center  
Medical Center Hospitals

Henry W. Moore, M. D.

Director, Poison Control Center  
Columbia Hospital

Hilla Sheriff, M. D., Director

Division of Maternal and Child Health  
S. C. State Board of Health

## MEDICAL COLLEGE AWARDS DIPLOMAS TO 145 STUDENTS

Women graduates took first honors in three schools of the college—medicine, pharmacy and nursing.

Heningham Anne Duell Morgan of Charleston was first honor graduate of the School of Medicine; Frances Evelyn Thomas of Charleston took top honors in the School of Pharmacy; and Dorothy Eugenia Hyatt Lack of Walterboro was first honor graduate of the School of Nursing.

Mrs. Lack's competition for nursing honors was all female but Miss Thomas and Dr. Morgan both were members of predominantly male classes.

The School of Medicine conferred degrees of doctor of medicine on 68 graduates, all except

three of whom were men, Newton Craig Brackett, Jr. of Pickens and Bertrand Victor Gue, Jr. of Orangeburg, who was class president, shared second honors. The men completed their four years of college work with exactly the same average.

Nineteen graduates, three of them women, were awarded bachelor of science degrees in pharmacy. Second honors also went to a woman—Mrs. Lythea John Chakeris of Charleston.

Second honors in nursing in a class of 58, were won by Lucia Rose Powell of Anderson. The title of graduate nurse was conferred on each of the graduates. Also recognized were 10 absent affiliate graduates of the School of Nursing and the University of South Carolina.

Two men—Earl Edward Aldinger of Charleston and Jerry Morgan Smith of Conway—received master of science degrees in pharmacology from the Graduate School of Basic Sciences.

Dr. George F. Lull, president of the American Medical Education Foundation, delivered the commencement address at the 132nd graduation exercise, staged on the grounds of the Medical College Hospital.

Dr. Lull called attention to the fact that although the population of the United States had doubled this century, the population of the age group 65 years and over had quadrupled.

"This," he said, "has brought about changes not only in our medical practice but in the economics of the whole country."

Medical education, he continued, has improved to such an extent in this country that when a man receives his M.D. degree from an American medical school he has "at least been exposed to the highest type of medical education."

Dr. Lull explained that the American Medical Education Foundation was organized in 1951 to obtain assistance from the medical profession for medical schools.

"At approximately the same time," he continued, "the National Fund for Medical Education was organized by businessmen and educators to seek voluntary private support from the nation's business groups."

"The interest in the un-met financial needs of our medical schools is nowhere more encouraging than here in the medical profession of South Carolina," he added.

"Through the efforts of Dr. Lynch (Dr. Kenneth M. Lynch, president of the Medical College of South Carolina), the members of the Medical College faculty, the Alumni Association of the college and the physicians practicing throughout the state, South Carolina leads all Southern states with a total of \$40,149 in 1958, an increase in contributions from \$14,267 in 1957."

Referring to the role of industry, Dr. Lull said

it had made great strides in its acceptance of responsibility in health and medical education during 1958. Medical schools need industry's support, he said, as much as industry needs the vital role of the medical schools in the health and welfare of the community.

Dr. Lull urged members of the graduating classes to enter into the affairs of their communities and help guide these affairs into channels best for all concerned—not merely best for individual groups.

In his opening remarks, Dr. Lynch spoke of the complexities and magnitude of financing, developing, organizing and operating a modern educational center of the health professions.

"The organization serving as the owner and operator is the base," he said, of the operation which he referred to as a game.

"Perhaps next should come the community in which the institution is located," he continued, although this interest is not always clearly acknowledged. That community automatically secures advantages, both economic and in service.

"Besides the support coming from government, representing the public, and regardless of whether a state may be owner and operator, and besides the individual and independent contributions, recently there have come into play two organizations devoted to the support of the medical schools over the nation. One of these is known as the National Fund for Medical Education."

This organization, he explained represents the industries of the country as they have come to recognize their stake in medical education. "Mainly, as yet," he said, "this stems from the great national companies, but it would be profitable for any community or region bidding for industrial development to become actively conscious of the attraction value of a readily available center of medical education, research and service."

During the exercises an Alumni Citation Award was presented to former South Carolina governor Ransome Judson Williams, a pharmacy graduate in the class of 1914.

Dr. Lynch conferred degrees and titles on the graduates and Dr. Thomas Antley Pitts, chairman of the board of trustees of the college, presented the diplomas. Graduates were introduced by heads of the schools. The invocation and benediction were by the Rev. Feltham S. James, pastor of Bethel Methodist Church, and organ music was by William R. Quarterman, Jr., dean of the Charleston Chapter of the American Guild of Organists.

—*News and Courier*

REPORT ON ACTIONS OF THE HOUSE  
OF DELEGATES  
AMERICAN MEDICAL ASSOCIATION  
108th ANNUAL MEETING  
JUNE 8 - 12, 1959  
ATLANTIC CITY

ATLANTIC CITY, June 12—The report of the A.M.A. Commission on Medical Care Plans, relations between medicine and osteopathy, the report of the Committee on Preparation for General Practice and the issue of compulsory Social Security coverage for self-employed physicians were among the major subjects which brought important policy actions by the House of Delegates at the American Medical Association's 108th Annual meeting held June 8 - 12 in Atlantic City.

Another highlight of the meeting was the appearance of President Dwight D. Eisenhower, who addressed an over-flow audience of more than 5,000 at the Tuesday night inauguration of Dr. Louis M. Orr of Orlando, Florida, as the 113th president of the A.M.A. It marked the first time that a President of the United States has addressed an A.M.A. annual or clinical meeting.

Dr. E. Vincent Askey of Los Angeles, speaker of the House of Delegates since 1955, was named president-elect for the coming year. Dr. Askey will succeed Dr. Orr as president at the association's annual meeting in June, 1960, in Miami Beach.

The 1959 Distinguished Service Award of the American Medical Association was voted to Dr. Michael E. De Bakey of Houston, Texas, chairman of the department of surgery at Baylor University College of Medicine, for his outstanding contributions in the field of cardiovascular surgery. Dr. De Bakey received the award at the Tuesday night inaugural ceremony.

Total registration through Thursday, with half a day of the meeting still remaining, had reached 28,225, including 12,921 physicians.

*Eisenhower Address*

President Eisenhower, speaking at the inaugural ceremony in the ballroom of Convention Hall, warned that inflation posed the greatest danger to the traditional, free enterprise practice of medicine. The cost of inflation, he said, "is not paid in dollars alone but in increasingly stagnated progress, lost opportunities, and eventually, if unchecked, in lost freedoms for the doctor and the patient." Mr. Eisenhower also expressed gratification at learning of A.M.A. leadership in the program to meet the health care needs of the aged.

*Commission on Medical Care Plans*

The House of Delegates received Part I of the report of the Commission on Medical Care Plans as information only and then acted upon the Commission recommendations item by item. The House adopted 36 of the recommendations without change,



but reworded three which relate to miscellaneous and unclassified plans. The changed recommendations now read as follows:

B-4. "In an effort to decrease, or at least to prevent an increase, in the over-all cost of health care, study should be given to the removal of the requirement of hospital admission as the only condition under which payment of certain benefits will be made."

B-6. "Medical care plans should be encouraged to increase their efforts to provide health education and information concerning the coverage of their subscribers."

B-16. "The American Medical Association believes that free choice of physician is the right of every individual and one which he should be free to exercise as he chooses. Each individual should be accorded the privilege to select and change his physician at will or to select his preferred system of medical care and the American Medical Association vigorously supports the right of the individual to choose between these alternatives."

In connection with free choice of physician, the House also requested the Board of Trustees to transmit to all constituent medical associations the "far-reaching significance" of Recommendation A-7, which says:

"Free choice of physician is an important factor in the provision of good medical care. In order that the principle of 'free choice of physician' be maintained and be fully implemented, the medical profession should discharge more vigorously its self-imposed responsibility for assuring the competency of physicians' services and their provision at a cost which people can afford."

The House also strongly endorsed Recommendation B-11, which declares that "Those who receive medical care benefits as a result of collective bargaining should have the widest possible choice from among medical care plans for the provision of such care."

Many of the Commission recommendations urged increased activity by state and county medical societies and the American Medical Association in such fields as continuing study and liaison, closer attention to legal and legislative factors, and the development of guides for the relationship between the medical profession and the various types of third parties. To carry out three of the recommendations involving A.M.A. activities, the House also approved a seven-point program which it requested the Board of Trustees to transmit to the Division of Socio-Economic Activities for immediate attention.

#### *Medicine and Osteopathy*

In considering a special report of the Judicial Council on the subject of osteopathy, the House adopted the following policy statement regarding inter-professional relations:

"(A) All voluntary professional associations between doctors of medicine and those who practice a

system of healing not based on scientific principles are unethical.

"(B) Enactment of medical practice acts requiring all who practice as physicians and surgeons to meet the same qualifications, take the same examinations and graduate from schools approved by the same agency should be encouraged by the constituent associations.

"(C) It shall not be considered contrary to the Principles of Medical Ethics for doctors of medicine to teach students in an osteopathic college which is in the process of being converted into an approved medical school under the supervision of the A.M.A. Council on Medical Education and Hospitals.

"(D) A liaison committee be appointed by the Board of Trustees of the American Medical Association to meet with representatives of the American Osteopathic Association, if mutually agreeable, to consider problems of common concern including inter-professional relationships on a national level."

In another action concerning osteopathy, the House recommended that the American Medical Association representatives on the Joint Commission Accreditation of Hospitals suggest to the Joint Commission that they inspect upon request and consider for accreditation without prejudice those hospitals required by law to admit osteopathic physicians to their staff.

#### *Preparation for General Practice*

The House approved and commended the final report of the Committee on Preparation for General Practice, which proposes a new two-year internship program for medical school graduates planning to become family physicians. To avoid unnecessary confusion, the House deleted only one sentence which read: "Indeed, the committee believes that the one year internship actually encourages inadequate preparation for general practice." The Committee on Preparation for General Practice included representatives from the A.M.A. Council on Medical Education and Hospitals, the American Academy of General Practice and the Association of American Medical Colleges.

The suggested program would include a basic minimum of 18 months hospital training in the diagnostic, therapeutic, psychiatric, preventive and rehabilitative aspects of medicine and pediatrics in a very broad sense, including care of the newborn. A physician then could elect to spend the remaining six months for additional training in other segments of the program. The committee stated, however, that participants who plan to practice obstetrics would be expected to spend at least four months of the elective period in obstetrical training.

The report declared that "the graduate program of two years in preparation for family practice should be planned and implemented as a unified whole" with a maximum continuity of assignment in specific services. The program also calls for adequate experience in outpatient care and emergency room service.



## Social Security

In considering five resolutions on the subject of compulsory Social Security coverage for self-employed physicians, the House disapproved of four and adopted one reaffirming its opposition to the compulsory inclusion of physicians. In so doing, the delegates expressed concern over the possible effects that a change of policy might have on the Association's entire legislative program, particularly with respect to the Forand Bill.

The House also recognized "the apparent growing demand by physicians for economic security" and requested the Board of Trustees to investigate the possibilities of developing group insurance and retirement plans which could be made available to Association members. It accepted a reference committee suggestion "that the American Medical Association continue and expand its educational program to inform its members of the economic, social and moral advantages of economic security obtained within the framework of our free enterprise system rather than through the mechanisms of governmental Social Security."

## Miscellaneous Actions

In dealing with a wide variety of other subjects, the House also: Urged all physicians to participate more fully in community activities and *socio-economic matters* in their own communities but agreed that no change should be made at this time in Article II of the Constitution, which states Association objectives;

Approved in principle the aims and objectives of the President's Council on Youth Fitness and the Citizens Advisory Committee on the Fitness of American Youth;

Accepted a Board of Trustees recommendation that the 1962 *Annual Meeting* be held in Chicago;

Expressed heartfelt thanks to the Committee on Amphetamines and Athletes, which has completed its assignment;

Requested the Board of Trustees to study the problems and possibilities of establishing an A.M.A.—sponsored *medical scholarship* and/or loan program;

Approved the inclusion of *Today's Health* as a benefit of dues-paying membership and urged members to make it available to their patients;

Recommended that state medical societies, where advisable, initiate legislative efforts to eliminate *cancer quackery*;

Received a progress report indicating "phenomenal progress" in the field of health insurance coverage for the *aged* since the Minneapolis meeting last December;

Gave a rising vote of thanks to *Dr. Joseph D. McCarthy*, who finished his term as chairman of the Council on Medical Service;

Reaffirmed its full support of the Educational Council for *Foreign Medical Graduates*;

Endorsed the purposes outlined in the initial report of the *Medical Disciplinary Committee*;

Urged every A.M.A. member to give a substantial gift to the *medical schools* through the American Medical Education Foundation; and

Expressed appreciation for the outstanding *disaster medicine* program presented by the United States Army Medical Service on June 6, 1959, in Atlantic City.

## Opening Session

At the Monday opening session Dr. Gunnar Gundersen of LaCrosse, Wis., retiring A.M.A. president, stressed the personal responsibility of every physician to keep abreast of medical advancements and to deliver "1959 medicine." Dr. Orr, then president-elect, called for concerted effort and medical leadership in four areas—the costs of medical care, recruitment of dedicated medical students, basic research and health care of the aged. Dr. Carl V. Moore, Busch professor of medicine at Washington University, St. Louis, was presented with the eighth Goldberger Award in clinical nutrition. Smith, Kline and French Laboratories of Philadelphia received a special A.M.A. award for its sponsorship of color medical television over the past ten years.

## Inaugural Ceremony

Dr. Orr, in his Tuesday night inaugural address, affirmed his belief in the basic principles of medicine, democracy and faith under which America's physicians live. He pointed out that freedom must continually be fought for by men and women who are willing to stand up and be counted. Dr. Leonard Larson of Bismarck, N. D., A. M. A. Board Chairman, administered the oath of office to Dr. Orr, and the latter presented the Distinguished Service Award to Dr. De Bakey. The Fort Dix Band Chorus presented the musical program.

## Election of Officers

In addition to Dr. Askey, the new president-elect, the following officers were selected at the Thursday session;

Vice president, Dr. James Stanley Kenney of New York City; speaker of the House of Delegates, Dr. Norman A. Welch of Boston, and vice speaker, Dr. Milford O. Rouse of Dallas, Tex.

Dr. R. B. Robins of Camden, Ark., and Dr. Hugh H. Hussey, Jr. of Washington, D. C., were re-elected for five year terms on the Board of trustees. Also elected to the Board, for the first time, was Dr. Percy E. Hopkins of Chicago.

Dr. J. M. Hutcheson of Richmond, Va., was re-elected to the Judicial Council. Re-elected to the Council on Medical Education and Hospitals were Dr. Charles T. Stone, Sr. of Galveston, Tex., and Dr. W. Andrew Buntin of Cheyenne, Wyo.

Dr. Willard Wright of Williston, N. D., was elected, and Dr. J. Lafe Ludwig of Los Angeles was

re-elected to the Council on Medical Service. Dr. William Hyland of Grand Rapids, Mich., was re-elected to the Council on Constitution and Bylaws.

F. J. L. Blasingame, M. D.  
Executive Vice President  
American Medical Association

## FRIENDS AND COLLEAGUES HONOR DR. W. R. WALLACE



W. R. WALLACE

Early in June a testimonial dinner was given in honor of Dr. W. R. Wallace. Dr. Wallace has completed fifty years of practice in Chester, and the dinner was an opportunity for an expression of esteem and appreciation from his innumerable friends there.

Dr. Wallace, practicing in Chester since 1909, received his AB degree from Presbyterian College, Clinton, in 1903. He served as principal of Ellenton High School in Aiken County for two years and in 1905 entered the Medical College of Virginia where he completed the four year course in three years. The doctor was graduated in 1908 and was appointed as intern in Memorial Hospital, Richmond, Va., as a member of the adjunct faculty in the Department of Physiology.

From Memorial Hospital, Dr. Wallace transferred to Roper Hospital of Charleston and served during 1908-1909. During a part of this service he was Chief of Staff of the Hospital.

Locating in Chester in June of 1909, Dr. Wallace was associated for several years with the late Dr. Harvey E. McConnell, whose practice at that time was the largest in Chester. Following Dr. McConnell's death, his associate continued on in the same offices.

In 1915 in association with Dr. McConnell, Dr. Abell and several others, Dr. Wallace helped to organize the Chester Sanatorium which they operated for a number of years. The Sanatorium group also operated Pryor Hospital for approximately 30 years before the construction of the new Chester County Hospital.

During his fifty years of medical service, the good doctor has taken an active interest in many activities, including church, civic and public organizations.

Recently at the meeting of the South Carolina Medical Association at Myrtle Beach in May 1958, Dr. Wallace was presented a leather-bound citation in appreciation of his services as president during 1914-45 of the Association.

Again on May 23, he was awarded an embossed volume of poems "Golden Leaves" in recognition of 36 years of unselfish service in the interest of public health.

In addition to the above activities, this gentleman has served as president with the Tri-State Medical Association, past-President of Chester Rotary Club and is a trustee of Presbyterian College, Clinton.

Dr. Wallace has been chairman of the Executive Committee of the State Board of Health for many years.

## ANNOUNCEMENTS

### POSTGRADUATE OBSTETRIC- PEDIATRIC SEMINAR 9TH ANNUAL SESSION

Thur. - Fri. - Sat. - August 20-21-22, 1959

Ellenor Village Country Club

DAYTONA BEACH, FLORIDA

Program Chairman—E. F. McCall, M. D.,  
Chairman

Maternal Welfare Committee—Florida Medical Association

Sponsored by the State Health Departments  
of South Carolina, Georgia, Florida, Alabama

American Academy of General Practice Approval—15 Hours—Category I

Hawaiian Buffet—Swimming—Golf  
(No Seminar Registration Fee)

### INSTITUTE OF INDUSTRIAL MEDICINE

New York University Post-Graduate Medical School  
offers a

Two-Month Course for Physicians

in

### OCCUPATIONAL MEDICINE

September 14 through November 6, 1959

For applications address: Office of the Associate  
Dean, New York University Post-Graduate Medical  
School, 550 First Avenue, New York, 16, N. Y.

## DEATHS

### DR. I. RIPON WILSON

Dr. I. Ripon Wilson, 83, of Charleston, died June 14 in a local hospital. He was a former president of the Medical Society of South Carolina and a one-time mayor of Charleston. He was a native of Toogoodoo, and was graduated from the Medical College of South Carolina with a pharmacy degree in 1900. He received a medical degree in 1913 and practiced medicine ever since.

### DR. C. M. SCOTT

Dr. C. M. Scott, 68, of Hartsville, died June 14 following a short illness.



# BLUE CROSS . . . BLUE SHIELD



Dear Dr. Waring

I have always resented Blue Cross and Blue Shield being "damned with faint praise" and I rebel at their being ignored entirely. On behalf of the Plans both locally and nationally I should like to express some personal reactions to Dr. Gundersen's banquet address at the recent State Medical Association Meeting.

As I am sure you will recall, Dr. Gundersen dwelt at great length upon the general plight of the senior citizens of this country and more specifically upon their health care needs, while urging that the medical profession must do something to correct at least the latter situation. He added that in their efforts the medical profession would find "powerful allies" in the commercial insurance industry.

That the commercial companies may function as such is possible; however, I would say that past history should lead one to ponder the motivation. In fact, I think that it would be entirely proper to attribute the rather untenable situation we find today in regard to the old-age category as much to the profit oriented underwriting of the commercial insurance companies as to any other single factor.

In rather vivid contrast, I should like to point to the record of Blue Cross and Blue Shield. According to a report of the Blue Cross Association issued about a year ago, approximately 3,400,000 persons over 65 years of age were enrolled in Blue Cross. At that time, this represented about 65% of all persons over 65 who were estimated by the Social Security Administration to have some form of hospital prepayment protection.

On the Blue Shield side, in 1957 of approximately 40,000,000 persons enrolled 2,500,000 were over age 65. Again, of those in that age bracket who had coverage, Blue Shield covered almost 50%. As an indication of its long-time recognition of this problem, in the six years from 1951 to 1957, Blue Shield's enrollment of members over age 65 increased 170% while total enrollment increased only about 85%. At the present time, I am sure these above figures have increased materially both in absolute terms and as percentages since Blue Cross and Blue Shield have always recognized as inescapable their responsibility to the *whole* community. Until just recently it has been almost exclusively a feature of Blue Cross and Blue Shield that any member on retirement or on leaving a group could retain his coverage by "conversion" to a "direct-pay basis" regardless of age, state of health or need for benefits. In addition, few Plans have imposed any age limits on initial enrollment and in ever increasing numbers Plans are ac-

cepting non-group members regardless of age.

Dr. Gundersen also laid great emphasis on the necessity of developing a low cost old-age contract. I am sure we are all proud of the fact that this was virtually an accomplished fact prior to his appearance before the Association. The real point I am trying to make, however, is that only through their own plan—physician-sponsored Blue Shield—did the medical profession have a ready mechanism for the speedy fulfillment of a pressing need.

As a final thought, I would submit that under increased pressures of time and tempo, to embrace suddenly extemporary allies, without considerable thought to the demonstrated results and even greater potential strength of the home troops who have been fighting the good fight as comrades in arms since the battle was first begun, might afford a questionable course of action.

Cordially yours,  
William Sandow, Jr.  
Executive Director

---

## SOMEBODY LOVES US

(From *The News and Courier*, June 4, 1959)

### PILLARS OF STRENGTH

Almost a full page of this newspaper was devoted Wednesday to pictures of the 160 men and women who are in the 1960 graduating class of the Medical College of South Carolina. This space was well used, for these are people important to the future of the state: doctors, pharmacists, pharmacologists and nurses. They have received excellent instruction from able professors. The people of this state provided them with modern buildings and equipment needed for study.

The state's investment in the skills of these graduates was wise. It will produce dividends in health and better living for all the communities in South Carolina. There are other dividends, however. Doctors, pharmacists and nurses are strong, stable elements in every community. They are people who are trusted and who carry burdens of responsibility for others. Such people are pillars of strength within a state.

---

From 1953 to 1958, according to Health Information Foundation, the proportion of individuals with insurance protection against hospital costs increased from 57 to 65 per cent of the U. S. population. During the same time the proportion of persons with medical-surgical insurance rose even more, from 48 to 61 per cent of the population.



**Urology Award**—The American Urological Association offers an annual award of \$1000 (first prize of \$500, second prize \$300 and third prize \$200) for essays on the result of some clinical or laboratory research in Urology. Competition is limited to Urologists who have been graduated not more than ten years, and to hospital internes and residents doing research work in Urology.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Palmer House, Chicago, Illinois, May 16-19, 1960.

For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before December 1, 1959.

Yours very truly,  
Prize Essay Committee  
Miley B. Wesson, Chairman

"Too much work and not enough play" is an occupational dilemma the U. S. physician should resolve if he wants to keep up his own health standards.

Evidence reveals that the average physician is so



"I suggest two weeks of fishing in your case, Doctor."

busy taking care of others that he doesn't have time to take care of himself.

Parke, Davis & Company's "Patterns of Disease" reports a special survey on physicians' health practices and standards. The survey, both the largest and most recent of its kind, was conducted among more than 9,000 practicing physicians under 65 years of age engaged in private practice in this country.

The U. S. physician undertakes a far heavier work load than the average person. Half the physicians in this study reported a work week of 50 hours or longer — at least 20 per cent more than the accepted norm of 40 hours. In fact, 13 per cent work 60 to 64 hours and 6 per cent 80 hours or more!

The result is he has very little leisure time. Close to 60 per cent of the physicians in the study stated they spend less than 10 hours a week on recreation. Even the physician with a hobby has virtually no opportunity to pursue it. Of the 37 per cent who mentioned hobbies, for instance, half stated that they spent only four hours a week or even less on their particular hobby.

Vacations, too, tend to be inadequate. One out of 20 physicians reported they took no time off for vacations during the year, and more than one in 10 took only a week or less.

Despite his crowded working schedule, the physician loses less time from work due to illness than the average man. Two-thirds of the doctors in the "Patterns" study reported no time lost from work last year. The remaining third reported an average time of 3.8 days lost due to illness as against 7.4 days of work-loss by the average American man.



provides therapeutic levels . . . for 24 hours . . . with low incidence of sensitivity reactions . . .

WHENEVER SULFAS ARE INDICATED<sup>®</sup>

# KYNEX

Sulfamethoxypyridazine Lederle

0.5 Gm. TABLETS/NEW ACETYL PEDIATRIC SUSPENSION

LEDERLE LABORATORIES, a Division of  
AMERICAN CYANAMID COMPANY, Pearl River, New York





## A HOSPITAL FOR NEGROES IS DEDICATED IN CHARLESTON

Dedication ceremonies for the new McClellan-Banks Memorial Hospital on Courtenay Drive on May 31 drew a crowd of approximately 650 persons.

The 31-bed hospital which cost \$686,000 in county and federal funds is now open for patients. It has one private room, 11 two-bed rooms and two four-bed wards and a conference room.

The hospital was termed "the beginning of a crusade against disease" by U. S. Rep. L. Mendel Rivers. The Charleston congressman predicted expansion of the facilities. "It is only the beginning in our cause to alleviate human suffering," he said.

Rivers praised the work of Dr. T. C. McFall, the Charleston physician who will be administrator of the new hospital. He has been a leader in efforts to establish the new unit as a replacement for the old Negro Hospital and Training School on Cannon Street.

Dr. McFall's young son, Bernard W. McFall, cut

the ribbon officially opening the hospital during yesterday's dedication.

Other speakers who praised the new medical facility were Dr. G. S. T. Peebles, South Carolina state health officer; J. Mitchell Graham, chairman of Charleston County Council, and Charleston Mayor William McG. Morrison.

The hospital is named in honor of Dr. Alonzo Clifton McClellan and Mrs. Anna D. Banks.

Dr. McClellan helped found the old Negro center and served as its medical director and surgeon until his death in 1912. He was a native of Columbia and a graduate of Howard University schools of pharmacy and medicine.

Mrs. Banks was the first head nurse of the old Hospital and Training School and later became superintendent of nurses. She died in 1930.

### KIND WORDS

The following article appeared in the column of George Sokolsky recently, and is reprinted by special permission of the *Charleston News and Courier* and the King Features Syndicate.

#### THINK BEFORE CRITICIZING YOUR DOCTOR

I have received a rather large mail in response to an article I wrote about doctors' fees. Those who complain have several arguments which ought to be aired.

On the subject that doctors' fees are exorbitant, I can hardly agree with the critics. A man is entitled to charge what he thinks his services are worth. If an hourly wage worker wants more money for his work, he might go on strike to get it. School teachers and other city employees threaten to go on strike for more money. But if a doctor charges what he thinks his services are worth, he is called a scalper. A reader writes:

"... Too many doctors today are absolutely commercial. They are thinking more of the almighty dollar than of the patient..."

A DOCTOR can think about his patients all day long, but he still has to pay for taxes, rent, food and

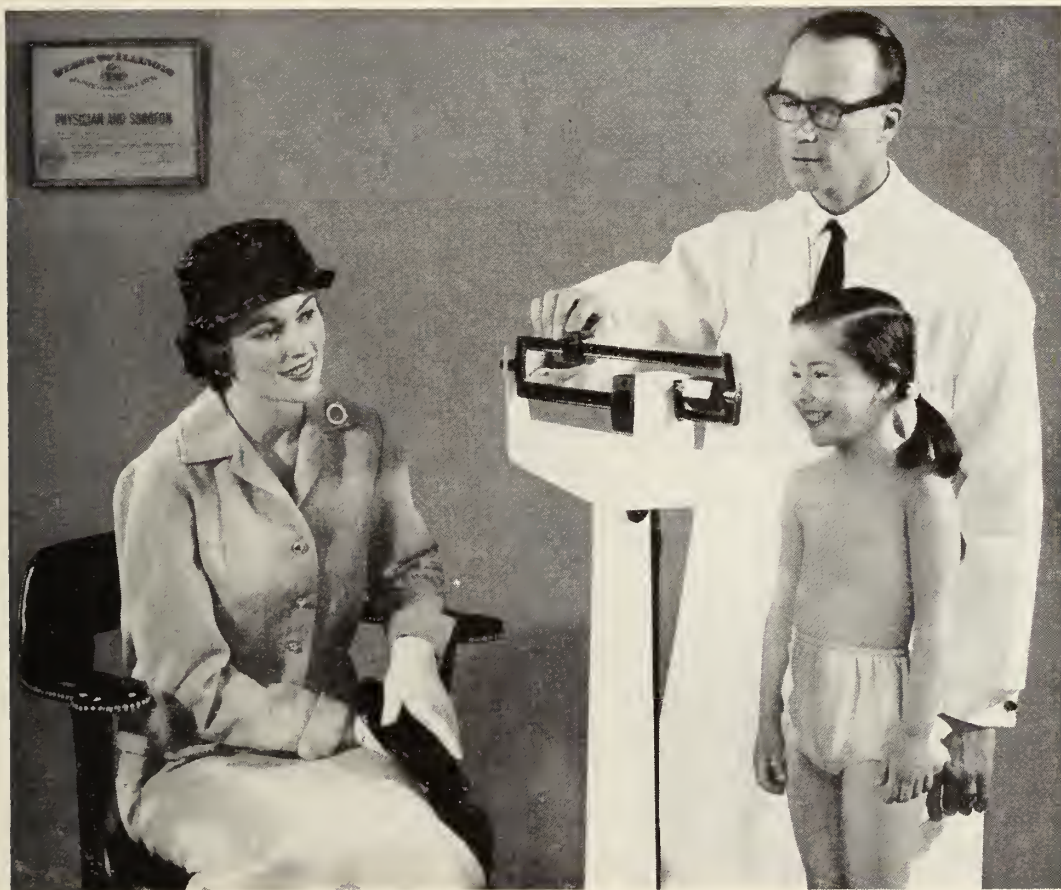
clothing, books, publications and instruments. He has no way of earning a living except by charging for his time, skill and services.

Some physicians and surgeons may charge more than their patients want to pay. That is a private transaction involving two individuals who can usually reach an understanding in advance of the services being rendered.

The complaint is made that doctors are hard to find on Wednesday afternoons and Sundays. This is one of the most difficult problems to solve. Folks get sick every day and at all hours of the day, but it is inhuman to expect that a doctor or anyone else will be around 24 hours a day, 365 days of the year. He might like to go fishing, too. He might like to visit his mother or attend a convention. He might even want to go to a show with his wife or to go courting so he can get a wife.

IN THE LARGER cities, arrangements are usually made by doctors to cover for their colleagues through a telephone answering service. It does not always work out satisfactorily, particularly in a real emergency. Local medical associations ought to work out these problems satisfactorily.





## Underweight Children Gain and Retain Weight with Nilevar<sup>®</sup>

One of the most convincing evidences of the anabolic activity of Nilevar, brand of norethandrolone, has been its ability to improve appetite and increase weight in poorly nourished, underweight children.

A highly important feature of the weight gain thus produced is that it is not ordinarily manifested by deposition of fat but as muscle tissue resulting from the protein anabolism induced by Nilevar.

**Anorexia and "Weight Lag" Study**—Brown, Libo and Nussbaum have reported\* consistent and definite increases in rate of weight gain in eighty-six patients, ranging in age from 7 weeks to 15½ years. This beneficial action of Nilevar was observed in the patients with organic and traumatic disorders as well as those whose only complaints were poor appetite and/or persistent failure to gain weight.

In this study, the weight gained was not lost

after discontinuance of Nilevar therapy although many patients did not continue the sharp gains effected by the drug.

The authors are of the opinion that Nilevar is a highly useful anabolic agent for influencing weight gain in underweight children.

When Nilevar is administered to children a dose of 0.25 mg. per pound of body weight is recommended and continuous dosage for more than three months is not recommended.

Nilevar is supplied as tablets of 10 mg., drops of 0.25 mg. per drop and ampuls of 25 mg. in 1 cc. of sesame oil. Further dosage information in Searle Reference Manual No. 4.

G. D. Searle & Co., Chicago 80, Illinois.  
Research in the Service of Medicine.

\*Brown, S. S.; Libo, H. W., and Nussbaum, A. H.: Norethandrolone in the Successful Management of Anorexia and "Weight Lag" in Children, Scientific Exhibit presented at the Annual Meeting of the American Academy of Pediatrics, Chicago, Oct. 20-23, 1958.



It would be both an opportunity and an experience for young interns to service such an emergency committee directly under a medical association so that doctors could be free on Sundays and on the Wednesday afternoon which some take off as a break.

The doctor who refuses under any circumstances to go on a house visit is wrong. I have never encountered such a physician, not even a specialist, but if there are such, they should be pilloried. There can be no reason for an absolute refusal to make a house call.

THE CRITICISM that doctors insist that patients go to a hospital for treatment is stupid. That is the best place to go to. It is impossible to give a patient as competent a treatment as in a hospital. When a doctor instructs a patient to go to a hospital, that is where the patient should go.

It is unfortunate that there is a shortage of hospitals in this country and it is a crime that some of the hospital workers in our large cities are being organized by professional union operators. Of course, everybody who works in a hospital is underpaid but is also true that practically no hospital is in the black.

The suggestion that comes from one reader that "doctors use all of the facilities of hospitals as places of business, putting it bluntly, without paying a cent for the privilege" strikes me as particularly nonsensical.

Any hospital-connected physician, having a private practice works for that hospital for free. If hospitals had to pay doctors for all the work they do in the hospital, such institutions would have to close down after the first year's budget.

AFTER READING quite a large number of letters, I have reached the conclusion that many persons expect to get medical services for nothing; that they do not appreciate that a physician is a human being with the unusual habits, ailments, and requirements of other human beings; that many Americans have lost the habit of paying as-you-go but have, because of the Depression and the wars, taken on a habit of having things done for them; that they do not appreciate top value but will accept what comes so long as it costs nothing.

---

## BOOK REVIEWS

---

*ATRIAL ARRHYTHMIAS, DIGITALIS AND POTASSIUM.* Bernard Lown, M. D., Harvard School

of Public Health; and Harold D. Levine, M. D., Peter Bent Brigham Hospital, Boston. Landsberger Medical Books, Inc., New York, 1958. Price \$6.90.

The relationship of the blood electrolytes to cardiac arrhythmias and digitalis toxicity is only recently receiving widespread recognition. Because it is of prime importance in the treatment of arrhythmias, and in the management of congestive heart failure itself, an understanding of this subject is of practical importance to nearly all physicians. One need not have a flame photometer at his elbow to recognize hypokalemia induced by excessive diuretic therapy, nor to administer potassium rationally for the control of these sometimes fatal arrhythmias.

This book may have grown out of the authors' well known studies of a particular type of paroxysmal atrial tachycardia ("P.A.T. with block") which in most of their cases was produced by digitalis toxicity. More than half of their book pertains to that arrhythmia. Along the way they present current concepts of the interactions between digitalis and potassium which enable one to prescribe and regulate digitalis with greater safety for the patient.

The book is less a comprehensive treatise of the various types of rhythm disorders arising in the atria than it is a discussion of some basic mechanisms in cardiac physiology. It is generously illustrated with illustrative electrocardiograms, authoritative, and readable.

Dale Groom, M. D.

---

Voluntary health insurance coverage is increasing faster among people 65 and over than among any other age group in the country. Forty-three per cent of the population 65 and older now has such insurance—an increase of almost 40 per cent in the last five years. —Health Information Foundation.

---

About seven out of every ten U. S. families now have some form of protection under voluntary health insurance, Health Information Foundation reports. The proportion of insured families has increased almost 10 per cent in the last five years.



# The Journal

of the

## South Carolina Medical Association

VOLUME LV

August, 1959

NUMBER 8

### SOCIO-ECONOMIC FACTOR IN MATERNAL AND PERINATAL MORBIDITY AND MORTALITY

ROBERT A. ROSS, M. D.  
Chapel Hill, N. C.

Until the hope of bringing the medically "inarticulate" person under the influence of a willing profession is realized, there is little possibility that we can improve the health of a still large segment of our people who greatly need help. The health of an individual and of an area cannot be assured by medical care alone. Nowhere is this fact more evident than in maternal morbidity and mortality and perinatal mortality. Certainly, all of us are aware of the significance in our own geographic area.<sup>1</sup>

A study of the maternal mortality statistics by states and counties of the southeastern area immediately reveals that the high rate of morbidity and mortality is in large part in the nonwhite and in the rural white women.

Chronic vascular diseases are more prevalent in this group.

The environment that predisposes to syphilis is just as important as the disease syphilis.

They subsist chiefly on a diet proved to be similar to a "pellagra" diet.

The patient and the patient's family are a great factor in preventable death.

Economic and intellectual enlightenment are necessary before improvements can occur.

The South educates approximately one-third of the nation's children with one-sixth of the national school revenue. Recently, this has been made more disproportionate in the

(From the Department of Obstetrics and Gynecology, University of North Carolina, School of Medicine)  
Read at 12th Annual Meeting South Carolina Obstetrical and Gynecological Society, Charleston, South Carolina, October 19, 1958.

South's effort to approach the now nullified "separate but equal" mandate.

Economics really means money in the bank and for every 100 dollars on deposit the South has less than 10.

The citizens of this area felt many obligations. Even though the mentally and financially able people of the South were motivated only by the most selfish instincts, they did realize the necessity of preserving the health and competency of the low economic class. It is well recognized that these 13 million persons are the greatest and probably the last source of manpower reserve. As a matter of fact, the thoroughly altruistic capable leaders have since colonial days taken a genuine and helpful interest in these people. This has continued and progressed even through the devastation and misery of the Civil War. The enlightened class had not only to strive for themselves but also had to carry the less fortunate through all kinds of political, sociologic, and especially economic discrimination.

Out of all this came a beleaguered "aristocracy," some of whom failed to maintain their character, a determined hard-working middle class, the artisans, the poor whites, and the nonwhites. By all studies, all the findings, or in spite of any adjustments or corrections, the latter two classes, the "ill-housed," "ill-fed," "ill-clothed," and medically inarticulate constituted the bulk of our obstetric morbidity and mortality, and even more significant, were the chief contributors to perinatal loss.

There are many more perinatal deaths than maternal deaths, and study of this abundant and varied material should give more critical data regarding the complications of childbirth. A valuable by-product is information regarding a prenatal and natal course that could possibly influence the production of crippling lesions, both organic and psychic, which contribute to perinatal deaths and abnormal infants. A contemplation of the crippled always brings solicited and unsolicited aid in an effort to heal and to help. Out of the many studies that are being carried out, there is a great deal of information that is in the category of socio-economic.

The preventable factors associated with perinatal mortality are largely the responsibility of the obstetrician. In 1954, in North Carolina, there were 4,500 perinatal deaths compared to 3,700 deaths from malignant disease and 2,400 deaths due to all accidental causes.

Donnelly,<sup>2</sup> and co-workers have reviewed over 6,000 deliveries in the three medical school hospitals in North Carolina and have scrupulously studied in minute detail the case records of 279 perinatal deaths, of which 163 were fetal and 116 neonatal, a perinatal mortality of 4.5 percent. These figures are statistically sound. The obstetrician is rightly concerned with these deaths since all of the fetal and 80 percent of the neonatal deaths came about under his observation and care. In this study, impact of prematurity was immediately apparent; 70 percent were premature and 60 percent weighed 2,000 grams or less. In a control group (every fifteenth patient) there were only two infants who weighed less than 2,000 grams.

Socio-economic factors which can be documented and usually accepted are: race, father's occupation, mother's education, and hospital financial classification. In 1935, the perinatal mortality rate per 1,000 live births was 110 for nonwhite and 65 for white. In 1955, this had dropped to 65 for nonwhite and 33 for white. However, when age and parity were considered in covariant analysis, race was so significant a factor.

The father's occupation was divided into three groups: roughly, professional people, managers, officials, etc. in I. Clerks, foremen,

craftsmen, etc. were in II. Farm laborers, unskilled workers, etc. in III. Group I rate was 60 percent lower than the control, while Group III was 50 percent greater than the controls.

The mother's education was evaluated in terms of years in school. The mothers who attended school eight years or less accounted for 29.7 percent of perinatal deaths, while the controls revealed only 16 percent. The mothers who had more than a high school education, by comparison, showed a reverse distribution. The private patient group had a definitely lower figure than the service group.

When the mother's age is considered, it was found that there was little difference in the ten to nineteen-year group, slight difference in the next decade, but significant difference at thirty years and over, 35 percent as compared to 25 percent in the controls. Total parity did not check as significant.

Premature rupture of the membranes occurred in 17.5 percent of the control patients and 27.8 in the study group. The association of labor resulting in the birth of a premature infant is a tremendous factor in calculations such as these.<sup>3</sup>

In 1914, there were 71,931 live births and 524 maternal deaths, while in 1955 there were 116,206 live births and only 100 maternal deaths.

There are now over 1,700 maternal death records in the files of the Committee on Maternal Welfare, over a thousand of which have been scrupulously studied. All of the larger categories have direct association with socio-economic situations.

The toxemias rank first with 26 percent; hemorrhage is second with 25 percent; followed by embolism, infection, and cardiac disease, each with approximately 7 percent; anesthesia caused 2.5 percent of the deaths; other obstetric causes 10 percent; and nonobstetric causes approached 15 percent.

The cause of eclampsia is not known. An accumulation of related data would seem to indicate there probably is no single cause. The parallels of malnutrition, dietary, racial and sociologic background, infections and systemic diseases, all participate; hypertension and vascular and renal diseases are associated with the tendency to preeclampsia, which may be-



come true eclampsia. In practically all cases we find inadequate or no prenatal supervision.

In addition, in this series of studied cases, the toxemias were thought to be a contributing factor in the cause of death in 8 percent of those listed under other causes. We do know that the duration of the symptoms of toxemia reflects unfavorably in the patient's longevity. Fortunately, the incidence of toxemia is decreasing.

"Hemorrhage" as a cause of death remains fairly constant. The usual background of placenta previa, abruptio placentae, ruptured uterus, operative interference, both vaginal and abdominal, and abortion follow average figures, but the analysis of deaths from ectopic pregnancy is revealing. In approximately 50 patients dying from hemorrhage associated with ectopic pregnancy, only half had surgery of any type, confirmatory procedures were seldom used, and transfusion, if used at all, for various ascribed reasons, was too little and too late. It is disturbing to find six patients in five years pronounced dead from intrapartum and postpartum hemorrhage when first seen by a physician. Fortunately, the increased number of small blood banks in modest centers and larger blood banks in every section of the state is favorably influencing the death rate of hemorrhage from all causes.

Anesthesia and analgesia certainly have a place in the management of labor, yet obstetric anesthesia has always been regarded in a somewhat casual fashion. The night supervisor, delivery room nurse, spare house officer, available doctor and even the doctor conducting the delivery are variously called on for the important function of giving "the anesthetic." This inept, though at times necessary practice, can account for 2.5 percent of maternal deaths.

If one relates the maternity mortality statistics of the United States to tabulation, it becomes immediately evident that the highest maternal mortality is in the areas of the highest nonwhite residents.

In the United States during the period of 1946-51, there were 12,923 major grants of governmental and private funds for medical research, totaling \$135,000,000.<sup>4</sup> There were 6,634 recipients, 80 percent receiving funds from one source only; 80 percent of the grants

# PERCENTAGE OF NONWHITE POPULATION IN THE UNITED STATES AND EACH GEOGRAPHIC DIVISION—1950

(Population enumerated as of April 1)

UNITED STATES	11.0
South Atlantic	24.0
East South Central	23.0
West South Central	16.5
Middle Atlantic	7.0
East North Central	6.5
Pacific	6.0
Mountain	5.0
West North Central	3.5
New England	2.0

were for less than \$50,000. In the Southeast, 55 institutions received 1,086 grants for a total of \$10,400,000, representing 13 percent of the total funds. Ten states received 75 percent of the total funds. North Carolina ranked 15th among the states and received between 1.5 and \$2,000,000. Mississippi was the lowest group, receiving less than \$100,000.

Of the total funds, only \$1,795,000 were allocated to the vague category of "pregnancy and newborn." It is obvious that benefit to the pregnant female and the newborn would come indirectly from other studies in various other categories. However, little, if any, of these funds can be translated in terms of patient care.

Furthermore, if we consider the low figure for our area and the low grants to our separate states and relate these to our frightful morbidity and higher mortality in pregnancy and newborn, it is not remarkable that we at times appear unhappy with our progress in the solution of our problems. However, as Hellman points out,<sup>6</sup> "At the present time research support in our field is adequate. The fault, if any, lies in our failure to supply adequately trained personnel to use the monies wisely."

The term "socio-economic conditions" is immediately recognized. However, the varied influences, currents, colorings, genesis, and implications are sometimes difficult to document. A simple thesis has been simply recorded.

The tenant farmer of the South is the peasantry of the South. Restriction in cotton and tobacco production, automation in industry and failure of the farmer in producing staples and trucking products has made such farming even less attractive. They were, and

still are, dependent on the interest and altruism of the stronger. This interest also has been manifest through trying circumstances, many and varied injustices and inequities, and overpowering reverses. Now, when there was an assurance of true reciprocal benefit, the grip has been lost. The medical profession and the socially conscious will continue in their hope and efforts toward a common good.

## REFERENCES

1. Ross, R. A.: A review of 1,000 maternal deaths in a rural state, *Am. J. Obst. & Gynec.* 66:1113, 1953.
2. Donnelly, J. F., Flowers, C. E., Jr., Creadick, R. N., Greenberg, B. G., and Wells, H. B.: Parental, fetal and environmental factors in perinatal mortality, *Am. J. Obst. & Gynec.* 74:1245, 1957.
3. Flowers, C. E., Jr., In press.
4. Deignan, S., and Miller, E.: The support of research in medical and allied fields for the period 1946 through 1951. Rept. National Research Council, 1952.
5. Letters.

# MATERNAL MORTALITY REVIEW FOR 1956

WILLIAM FRANK STRAIT, M. D.

AND THE

MATERNAL AND CHILD HEALTH DIVISION; STATE BOARD OF HEALTH\*

In the State of South Carolina each maternal death is reviewed by the Committee on Maternal Health. This group is composed of eight members; its chairman is Dr. Lawrence L. Hester, Jr., of Charleston, S. C. who assumed its leadership on July 1, 1956. The committee meets regularly in Columbia every other month. Discussion of cases takes place with complete anonymity of patient and physician maintained.

When a maternal death occurs, the chairman is notified, and a questionnaire is then sent out to the physician signing the death certificate. Consultants are also requested to submit any information they feel is of value. When all available information is at hand, the case is summarized and the summary mailed to each member of the committee and to the doctor involved. This physician is urged to attend the meeting in which his case is presented, and to enter into the discussion. No attempt is made to cast blame, nor to criticize others. The purpose is rather to discover what, if any, preventable factors are involved in maternal deaths, and to discuss measures and means to bring about the irreducible minimum of maternal deaths in South Carolina. After each case is discussed, the chairman corresponds with the physician and gives the findings of the committee.

To facilitate more rapid assimilation of facts

in each case, the obstetrical departments of all hospitals in the state now have maternal mortality questionnaires. Thus, should a death occur, the physician may fill this out when pertinent points of the case are fresh in his mind.

A continuing statistical analysis of all deaths is being carried out. Last year Dr. Harry Temple presented the statistics for 1955. The present paper will present and discuss maternal deaths occurring in South Carolina in 1956.

In 1956 there were 51 deaths of mothers in South Carolina. A maternal death has been defined as one occurring during pregnancy or within 90 days following pregnancy. It is realized that certain deaths will thus be included upon which pregnancy has no direct bearing; but by so broad a definition, some more remote deaths will be elucidated in which the pregnancy was of significance.

The 51 deaths have been tabulated according to primary cause of death in Table I.

Table I

Cerebral embolism	1
Pulmonary hemorrhage	1
Pulmonary embolism	8
Toxemia	14
Uterine hemorrhage	16
Infection	2
Cerebral hemorrhage	3
Lower nephron nephrosis	1
Peripheral vascular collapse	1
Undetermined	4
Total	51

\*Presented at the 12th Annual Meeting, South Carolina Obstetrical and Gynecological Society, Charleston, S. C. October 18, 1958.

Of the four cases in which no primary cause of death could be ascertained, one (Case No. 17-56) was a 15 year old unmarried colored girl who had dilatation and curettage for spontaneous abortion. Information is insufficient for a determination of cause of death or for the question of preventability. Another (Case No. 18-56) was an unwed 15 year old white girl who had a ccsarean section because of cephalo-pelvic disproportion as manifest by 3 hours of full dilatation with an unengaged fetal head and previous x-ray evidence of a small inlet. Her hemoglobin was 8.5 grams. She died during surgery and no autopsy was obtained. The surmise was pulmonary embolism, but evidence for this was inconclusive. A third case (Case No. 7-56) was a 35 year old colored female who died undelivered in the 38th week, the only information received being the death certificate which stated "high blood and weak heart". The fourth case unclassified (Case No. 43-56) was a 15 year old unwed colored female attended by a midwife at home. The placenta was not delivered, and information is too scanty to correctly ascertain cause of death, though one might reasonably blame hemorrhage from a retained placenta.

Table II shows the breakdown of deaths as to race.

<i>Table II-A</i>	
White	13
Colored	38
Total	51

It is noted that there were nearly three times as many colored deaths as white. The maternal mortality rate (incidence per 1000 live births) was 0.4 for white and 1.3 for colored. The combined rate was 0.8. The total number of live births for 1956 was 63,520, of which 28,200 were colored and 35,320 were white. This means 1 colored death for every 742 colored live births, and 1 white death for every 2,717 white live births.

In 1955, the discrepancy between the races was even greater, 1 death for every 454 live births occurring among the Negro race, and only 1:6975 for the white race.

<i>Table II-B—Incidence of Maternal Deaths</i>		
1955 White 1:6975	Colored 1:454	Comb. 1:941
1956 White 1:2717	Colored 1:742	Comb. 1:1245
1955 National average	1:2631	

Table III shows the outcome of pregnancies. Table IV shows the relation of deaths to pregnancy.

<i>Table III</i>	
Delivered	35
Stillborn	13
Liveborn	22
Undelivered	7
Abortion	6
Unknown	3
Total	51

<i>Table IV</i>	
<i>Deaths</i>	
Antepartum	7
Intrapartum	2
Postpartum	33
Unknown	3
Abortion	6
Total	51

Physicians (not specialists) were present at 35 of the deliveries; obstetricians were present at delivery of only 3. Midwives were in attendance in 9 cases; in seven of these the midwife alone was at delivery, and in five she alone was at death. Midwives were involved in approximately 16% (10,804) of all deliveries in the state for this year. However, (Case No. 44-56), a 31 year old grand multi-gravida, delivered a premature stillborn at home attended by a midwife. Some time later the family noticed that blood was running through the mattress and onto the floor, and urged the midwife to send for a doctor. The midwife refused, assuring them that the mother was all right. Finally a doctor was brought in, but the patient had exsanguinated before his arrival. Needless to say, the midwife was suspended indefinitely.

The value of antepartal care is vividly illustrated by Table V, which shows that 16 of the mothers received totally inadequate care (36%) and 5 received none (11%).

Table VI points out legitimacy and illegitimacy. Forty were married and 9 were unwed mothers.

<i>Table V—Prenatal Care</i>	
Adequate	19
Inadequate	16
Unknown	4
None	5

<i>Table VI—Legitimacy</i>			
White deaths	13	Colored deaths	38
Legitimate	12	Legitimate	28
Illegitimate	1	Illegitimate	8
		Unknown	2



Table VII—The Age and Parity of the Group

White	
Primigravida	7
Grand multigravida	1
Average parity	2.8 (1-8)
Average age	25.5 (15-43)
Colored	
Primigravidae	9
Grand multigravidae	9
Average parity	4.4 (1-12)
Average age	28.3 (15-44)

Age varied from 15 to 44 years, and parity from 1 to 12. Primigravidas accounted for 16 deaths, while grand multigravidas accounted for 10.

Deaths occurring in the home numbered 13 (all colored), while 38 occurred in the hospital. Thirty-two were classified as private, and 15 as service patients. In 23 of the cases,

Table VIII—Location

Home	13
Hospital	38

Table IX—Status

Private	32
Service	15
Undeter.	4

the pregnancy was at term, while 18 were premature, 8 pre-viable and the remaining 2 unknown.

Pitocin was used for induction in one case, amniotomy in 3 and a Voorhees bag in one case. This list is probably incomplete due to insufficient information, but in no cases could the fatal outcome be directly attributed to any of these factors. The case involving the Voorhees bag (Case No. 33-56) was a 42 year old colored grand multigravida who presented herself at 36-38 weeks with a blood pressure of 220/140, 2 plus edema of legs and face, having vaginal bleeding and exhibiting irrational behavior. She was treated with magnesium sulfate, morphine, Voorhees bag, and version and extraction of a stillborn fetus. Cervical lacerations were sutured. The patient then had a convulsion and expired. She was signed out as dying from a combination of abruptio placentae and eclampsia; however, the blood loss and trauma associated with the use of the Voorhees bag, and the version and extraction may well have contributed to this death.

Length of labor was more than 24 hours in 4 cases, less than 24 in 22, and unknown (or no labor) in 25 cases. The type of delivery was spontaneous in 23, mid-forceps and low

forceps in one each, and five were by section. One version and extraction was done, and two were delivered by breech extraction.

Toxemia was found to be the primary cause of death in 11 colored mothers and in 4 white, while contributing to 8 colored and 3 white deaths. It was present but non-contributory in an additional colored death. Hypertensive vascular disease was noted in 3 colored women, pre-eclampsia in 5 colored and 4 white, eclampsia in 11 colored and 3 white (Table X).

Table X—Toxemia

	Col.	White	Total
HVD	3	0	3
Pre-eclampsia	5	4	9
Eclampsia	11	3	14
Primary	11	4	15
Contributing	8	3	11
Non-Contributory	1	0	1

Hemorrhage was primary in 20 cases, while contributing to death in an additional 6 cases. Those involving rupture of the uterus may be of interest.

Table XI

Hemorrhage	Col.	White	Total
Primary	15	5	20
Contributory	6	0	6
Hemorrhage: Cause			
Abruptio	3	1	4
Postpartum atony	5	1	6
Placenta praevia	2	0	2
Rupture of uterus	2	1	3
Retained placenta	3	0	3
Abortion	2	0	2
Ectopic	1	0	1
Cerebral	1	2	3
Indeterminate	2	0	2

One case (Case No. 5-56) was a 22 year old colored female primigravida who was delivered at home by a physician after 48 hours of hard labor. Moderate bleeding occurred immediately postpartum but responded to Ergotrate. Sixteen hours postpartum the physician was recalled, and a vaginal examination disclosed a laceration of the cervix and a large, boggy uterus with probable extension of the laceration into the uterus proper. The patient died en route to hospital.

The second (Case No. 9-56) was a 23 year old white female whose first pregnancy terminated in a vaginal delivery of an 8 lb. 4 oz. live infant, and whose second pregnancy was ended by section of a stillborn. At 34 weeks gestation, in the 3rd pregnancy she had a

spontaneous complete rupture of the uterus along the previous vertical scar extending into the fundus. The uterus was removed. Twelve hours later, because of apparent intra-abdominal bleeding, the abdomen was reopened. Large areas of gangrenous bowel with thromboses of mesenteric vessels were found. This patient died on the operating table.

The third (Case No. 19-56) was a 41 year old colored female who had a criminal abortion at 20 plus weeks gestation. An autopsy disclosed a ruptured uterus as the cause of death.

Consultation was obtained in 18 instances, and deemed satisfactory in 15. Certification of deaths was termed accurate in 40 instances, inaccurate or undetermined in 11. Autopsy was obtained in only 8 (16%) and not obtained in 43 (84%) of cases. This factor re-

flects no credit upon the physicians of the state.

Preventability was assigned in the light of ideal circumstances; thus a fair number of these cases were judged preventable, but with the full realization that the physician was sometimes working under severe hardships.

Preventable deaths numbered 25 (50%) while 7 additional deaths were judged probably preventable.

Substantial reduction in maternal mortality has been observed in the United States in the past decade, made possible largely by availability of blood, antibiotics and increased awareness of the value of prepartal care. In localities where maternal welfare committees are in effect, this reduction has been even more dramatic. It is hoped that by the continued efforts of this and other committees, women may approach childbirth with ever increasing confidence in a successful outcome.

---

*Plasma catechol amine concentrations in myocardial infarction and angina pectoris.* P. C. Gazes, J. A. Richardson, and E. F. Woods. (Charleston) *Circulation*. 19:657 (May 1959)

Norepinephrine plasma levels were significantly increased in 13 cases of myocardial infarction and in 7 of these there was also a significant increase of epinephrine as compared to 7 normal subjects. There were no comparable increments of the amines in 6 patients with noncardiac types of pain.

In myocardial infarction there was a positive correlation of norepinephrine and transaminase levels, but there was no such relationship with epinephrine and transaminase.

In 12 cases of angina pectoris norepinephrine increased in 8 cases after exercise, whereas epinephrine increased in only 5. There was no significant change with exercise in the 7 normal subjects.

It is believed that these increases in plasma catechol amines in patients with myocardial infarction

and angina pectoris may play a significant part in therapy and prognosis.

*A comparative study of coronary disease in Haitian and American Negroes*, by Dale Groom, Edward E. McKee, Charles Webb, et al. (Charleston) *South. M. J.* 52:504, May 1959.

Pathologic evaluation of the degree of coronary and aortic atherosclerosis in 267 routine autopsies of Haitian and American Negroes revealed almost double the degree of coronary disease among the American members of this race. This held true generally for both males and females and at all age decades over twenty. No such difference was observed in the aortas of the same subjects.

Prominent environmental differences in these two population groups include those of stress, tempo of living, physical exertion and competitiveness, in addition to that of diet.

The results of this investigation suggest the importance of factors other than diet in the etiology of coronary disease.

# INVASIVE MOLE

## A CASE REPORT

W. R. GRIFFIN, M. D. AND L. L. HESTER, M. D.  
Conway, S. C. Charleston, S. C.

(From the Department of Obstetrics and Gynecology, Medical Center Hospitals, Charleston, S. C.)

**C**horioadenoma destruens, paraphrased invasive mole, is a designation used for the group of chorionic neoplasms characterized pathologically by persistent invasion of the myometrium by low grade malignant anaplastic sheets of trophoblastic cells usually still attached to a parent villus. The presence of these well differentiated villi is used by many authorities as a distinguishing characteristic of the benignancy of a mole. Grossly the lesion is characterized by a hemorrhagic nodule in the myometrium, hence the inability to reach it with the curette. On cut surface there is a circumscribed cavity containing fluid and clotted blood, at the periphery of which is the invasive trophoblast responsible for the lesion.

Clinically, invasive mole is characterized by various amounts of uterine subinvolution, post molar vaginal bleeding, and a persistent positive test for chorionic gonadotrophic hormone. There may be bilateral ovarian enlargement due to multiple lutein cysts of the ovary often associated with hydatidiform mole thought to be produced by the overstimulation of granulosa and theca cells by the excessive chorionic gonadotrophin. Rarely there may be a rupture of the uterus due to a penetration of the wall by the invasive mole resulting in death from hemorrhage or sepsis.

The incidence of hydatidiform mole is one in 2000 pregnancies. Hertig and Sheldon<sup>1</sup> found 32 cases of invasive mole in their 200 reported cases of hydatidiform moles. Eastman estimates the incidence of invasive mole as roughly that of chorioepithelioma.

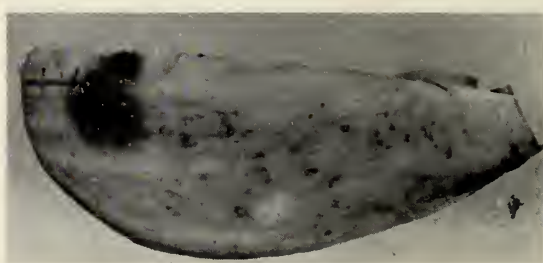
### Case Report

E. H., a 42 year old Negro female, gravida 8, para 8, aborta 0, with one stillbirth at 30 weeks gestation was admitted to Roper Hospital, on July 7, 1957, with a chief complaint of profuse vaginal bleeding. Her present illness began in February, 1957, when she described two menstrual periods of approximately five

days each. In March at her normal menstrual time, she passed clots per vaginam and continued to have remittant episodes of vaginal spotting until April, at which time she was hospitalized at Kings County Hospital Center, Brooklyn, N. Y. where dilatation and curettage of the uterus was done. Pathological report of the tissue obtained was "exocervical tissue and hydatidiform mole." After two days hospitalization, she was discharged from Kings County Hospital to return for periodic examinations as advised by her physician. There was no further vaginal bleeding until early June. It recurred remittently until July 6th, at which time she had an episode of severe vaginal bleeding.

On admission to Roper Hospital, physical examination showed BP 134/88 and pale mucous membranes. The rest of the physical examination was essentially negative except for the pelvic findings. There was a moderate amount of old blood in the vagina and the cervix was dilated to approximately 2.5 cm. The uterus was enlarged to 8-10 weeks pregnancy size. The hemoglobin was 8.5 Gm. and the white blood count was 5,200 per cu. mm. with a normal differential. A urinalysis was essentially normal. Blood urea nitrogen was 17 mg./100 ml., and a fasting blood sugar 111 mg./100 ml. A chest x-ray film was negative. Because of continued bleeding per vaginam a dilatation and curettage were done on the night of admission. Pathological report of the tissue obtained was "cervicitis, chronic, endometrial and necrotic tissue." On July 11th, a Friedman test was reported as positive. Another Friedman test 8 days later was described as strongly positive. Because of the absence of any diagnostic findings at operation to suggest a recent pregnancy or residual mole and the persistence of a positive Friedman test, the clinical impression was that of invasive mole or chorioepithelioma. Because of the presumptive diagnosis a total abdominal hysterectomy and incidental excision of a corpus luteum cyst of the left ovary was done on July 22, 1957.

Gross examination of the uterus removed showed a 1.5 cm. area of irregular hemorrhage and necrosis





within the wall of the uterus in the most superior portion of the fundus. Microscopic examination revealed "A deep seated nodular and hemorrhagic necrotic mass within which there are shadowy outlines of necrotic chorionic villi and associated clusters of viable trophoblasts of the cytotrophoblastic type." The cyst removed from the left ovary microscopically was verified as a corpus luteum cyst.

Postoperatively, the patient did well and a follow-up Friedman test three weeks post-hysterectomy was negative.

### Discussion

This case is an example of invasive mole apparently successfully treated by hysterectomy though the patient is now lost to follow-up. The important feature was the persistent positive test for chorionic gonadotrophin approximately 85 days after delivery of the mole with an associated negative curettage. With no evidence of a recent pregnancy in this patient nor evidence of hydatidiform mole by curettage and a positive Friedman test with no clinical metastatic disease, it seemed unwise to delay hysterectomy because of the likely probability of either invasive mole or chorioepithelioma.

Any patient with a positive gonadotrophin test 90 days post-molar evacuation warrants suspicion and close observation. Even in the absence of clinical symptoms a second curettage should be done. If no evidence of molar changes can be found at this time, a hysterectomy should be done, for the purpose of removing abnormal or malignant chorionic cells before metastasis takes place.

It has been generally believed that these tumors rarely give rise to clinical metastases and therefore the prognosis is excellent if the uterus is removed. Hertig and Sheldon<sup>1</sup> in a two or more year follow-up survey of 25 cases reported no metastases and no deaths due to chorionic malignancy. However because of the microscopic anaplasia of the trophoblastic cells, they have placed the tumor in the malignant group VI of hydatidiform moles. Delfs<sup>2</sup> reviewed five cases of invasive mole and described one death due to lung and extra-dural spinal metastases of microscopically benign mole. Another of her patients alive and well at 8 years follow-up examination was found initially to have implants of small nests of syncytial cells in the right broad ligament near

the line of excision as well as in the myometrium treated by hysterectomy and bilateral salpingo-oophorectomy and x-radiation which was considered of problematic value. H. Acosta-Sison<sup>3</sup> reported 4 cases with metastases, two to the vagina, cured by hysterectomy and partial vaginectomy; one to the lungs considered cured by hysterectomy and x-radiation of the lung, and one with generalized metastases that died untreated. Hunt *et al*<sup>4</sup> in a report of six cases of invasive mole described two cases with metastases—one to the lungs that regressed with hysterectomy and irradiation of lungs, the other to the pelvis and lungs that regressed with irradiation. They concluded that clinically demonstrable metastases can be expected in some instances, associated with a uterine lesion which is histologically an invasive mole.

Much has been said recently about the use of quantitative blood serum chorionic gonadotrophin determinations to evaluate the course of hydatidiform mole. Delfs<sup>2</sup> has shown that either a rising titre or a persistent gonadotrophin level above 20,000 IU/L more than 30 days after evacuation of a mole is an indication of trouble. When gonadotrophin is produced by retained fragments of mole, curettage is followed by a prompt decrease in gonadotrophin without subsequent rise. No case was reported which showed a negative interval followed by reappearance of positive assays, except in the case of new pregnancies.

Thus, the quantitative blood serum gonadotrophin study has the ability to mirror the dynamic growth potential of any remaining trophoblast from week to week and has the advantage of being able to sample the trophoblastic activity in whatever location whereas the curette is limited to the endometrium. A rising titer after a second curettage suggests a growth almost certain to be invasive mole or chorioepithelioma and the differentiation will frequently be made only from examination of the excised uterus. Unfortunately at our institution no facilities are available for quantitative gonadotrophin studies, which we felt would have been a great aid to us in treating our case.

After hysterectomy, gonadotrophin studies should be done at monthly intervals until three

negative assays are obtained. Close observation and additional assays should be continued for at least a year post-hysterectomy, to rule out previously unrecognized metastatic disease. In our case the Friedman test was found to be negative three weeks after hysterectomy. No additional reports are available because the patient has been lost to follow-up.

#### *Summary and Conclusions*

1. A case of invasive mole successfully treated by hysterectomy has been presented.
2. The clinical and pathological findings of invasive mole have been reviewed.
3. The value of a persistent positive test for chorionic gonadotrophin 90 days post-molar evacuation in the diagnosis of invasive mole has been emphasized.
4. A review of the literature reveals the ability of invasive moles to metastasize.
5. The use of quantitative blood serum chorionic gonadotrophin studies to accurately gauge

trophoblastic activity has been discussed. It is recognized that these studies are mandatory in accurately evaluating and treating hydatidiform mole.

6. Total hysterectomy has been established as curative therapy for invasive mole, but observation for a year after hysterectomy with frequent chorionic gonadotrophin assays is necessary to rule out unrecognized metastatic disease.

#### REFERENCES

1. Hertig, A. J., and Sheldon, W. H., *Am. J. Obst. & Gynec.* 53, 1, 1947.
2. Delfs, E., *Obst. & Gynec.*, Vol. 9, Jan. 1957.
3. Honoria Acosta-Sison, *Journal of the Philippine Medical Assn.* Vol. 3:388, August 1954.
4. Hunt, W., Dockerty, M. B., and Randall, L. M., *Obst. & Gynec.* 1: 593, 1953.
5. Kuperstein, D., and Mackles A., *Am. J. Obst. & Gyn.*, Vol. 68, P. 1136, Oct. 1954.
6. Gaum, A., *Canad M. A. J.*, 66:42, 1952.
7. Johnston, L. W. *Canad M. A. J.*, Vol. 72, 824, 1955.
8. Novak, E., *Obst. & Gynec. Surv.* 5: 107, 1950.

## CHORIOADENOMA DESTRUENS

ROBERT LUMPKIN, M. D.  
Georgetown, S. C.

### A CASE REPORT

J. H. B., a 36 year old white female, gravida 3, para 1, aborta 2, was first seen by me on July 30, 1956 as a referred patient for diagnosis. Her chief complaint was that of intermittent bleeding for the past two weeks.

She stated she had passed clots but no tissue and, prior to that time, had been approximately two weeks late on her menstrual cycle. The patient's menstrual cycle for the past year had been highly irregular. However, when the menstrual flow occurred it was normal in character, and this was the first time that she had experienced a heavy flow.

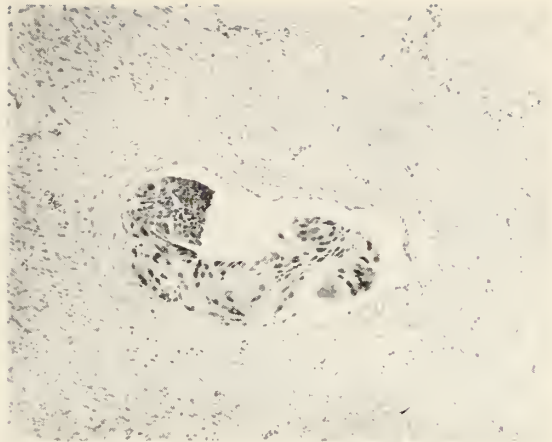
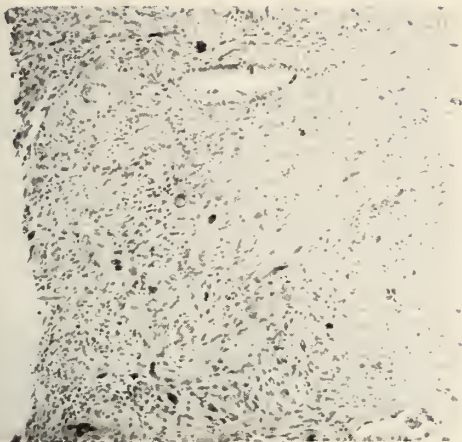
The patient complained of considerable tenderness in the supra-pubic area that radiated into the right side. This was of two weeks duration. She also gave a complaint of having had nausea, frequency of urination and tingling of the breasts for the past month. On pelvic examination it was noted that the patient's Bartholin's and Skene's glands, and urethra were negative, the perineal tone was good, the cervix was slightly blue with the os closed, the uterus was acutely anteverted and approximately 1½ times enlarged. There was a brownish discharge coming from the cervix. The adnexal areas were

negative and both ovaries appeared to be normal in size, shape and position.

A tentative diagnosis was made at this time of possible threatened abortion and the patient was referred back to her family physician for further care. No therapy was instituted by me at this time.

That night the patient was admitted to the hospital by her attending physician with a diagnosis of early spontaneous abortion and on August 1, 1956, her physician anesthetized her prior to doing a curettage for the abortion, and on pelvic examination found the cervical os to be closed, the uterus enlarged, and feeling that the pregnancy was still intact, he returned the patient to her room without any further procedure.

On August 2, at 9:30 P. M. the bleeding became quite profuse and the patient passed material which was characteristic of a hydatidiform mole. At this time I was called in again, and concurred with the diagnosis of hydatidiform mole and felt, due to the excessive bleeding, that immediate curettage was wise. Accordingly, at 10:00 P. M. her attending physician carried this out. On the 3rd of August the patient spiked a temperature to 103° F. and this



continued, in spite of antibiotics, until the 9th when I again saw the patient, and on examination felt a large, indurated tender mass on the left side. The patient had a leukocytosis of 12,600 cu. mm. I felt that the patient probably had a left tube-ovarian abscess. She was placed on broad spectrum antibiotics and by the 13th was completely afebrile, felt quite well, and the mass had disappeared.

On the 14th of August, a Friedman test was done which was reported as positive. Another Friedman test was then done on the 16th of August and this was again reported as strongly positive. It was our feeling then that we had no further reason to delay, and after obtaining adequate blood for the patient, under general anesthesia, a total abdominal hysterectomy was done. As the patient had had the right ovary removed previously, the left ovary was left in since there was grossly no evidence of invasion or malignant degeneration. On the 28th of August the pathologic report was, "chorioadenoma destruens with malignancy?"

"Sections of cervix show chronic inflammation. Multiple sections of the uterus show the endometrium to be composed of a thin layer of proliferative phase tissue. In the wall of the uterus, at one point, taken from the fundal region, there is an irregular area showing infiltration by extremely active, and friable trophoblasts of both Langhan's and syncytial trophoblast type. Well-preserved chorionic villi are also present. In vessels surrounding this region, there is similar tissue, including a chorionic villus.

It is impossible to tell from the histologic standpoint, whether this represents merely a malignant, hydatidiform mole or chorioadenoma destruens or whether this represents a true choriocarcinoma. The

presence of well developed chorionic villi, in this neoplasm, suggests that it more likely represents the former and suggests that this patient may have a good chance for survival. However, villi do rarely occur in choriocarcinoma and hence, this neoplasm might be of that type. The clinical course of this patient is the only thing which will make certain the correct diagnosis."

To continue with the report and the follow-up of this patient, on the 31st of August a pregnancy test was run which was reported as negative. The patient was seen again on the 31st of January at which time she was complaining of left lower quadrant pain. On pelvic examination the vaginal cuff was well healed and without induration, but there was a mass approximately 6 cm. wide in the left lower quadrant. With the patient's previous history it was felt by us that it would be wise to admit her for exploratory laparotomy and on the 3rd of February she was admitted to the hospital and on the 4th an exploratory laparotomy was carried out. An apparent corpus luteum cyst was found, and a left oophorectomy was done. The pathological report was that of a corpus luteum cyst. The patient made an uneventful recovery. Since this time the patient has had pregnancy tests run every six months, the last one having been done last month, all of which have been reported as negative. The patient has shown no evidence of deterioration, or of invasion. Repeated chest roentgenograms the last one having been done last month, reveal a negative chest. With the clinical course that this patient has followed, we feel that the diagnosis which the pathologist made is very probably the correct one, i. e., that of chorioadenoma destruens.





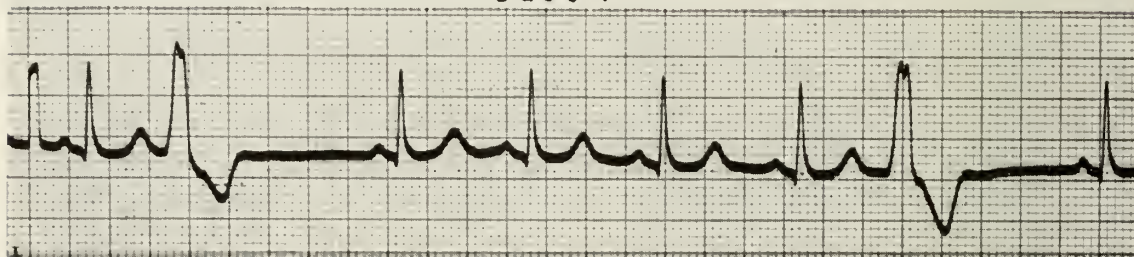
# MEDICAL COLLEGE CLINICS

---

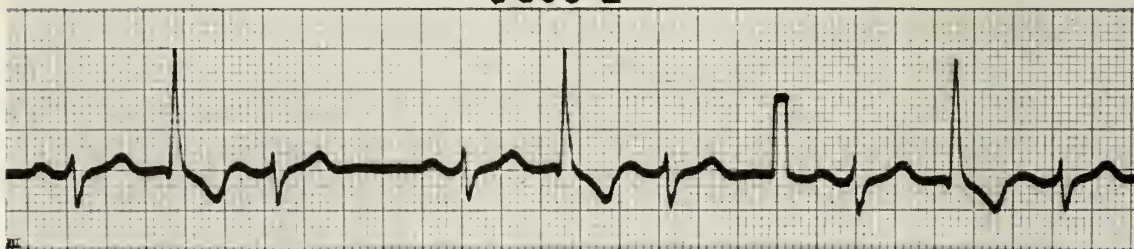
## THE MEDICAL COLLEGE OF SOUTH CAROLINA

---

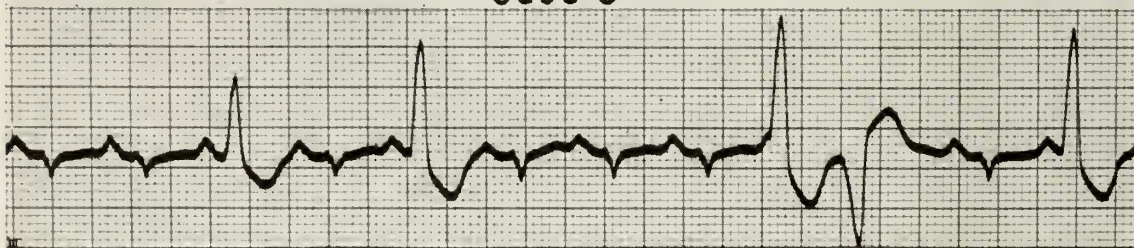
Case 1



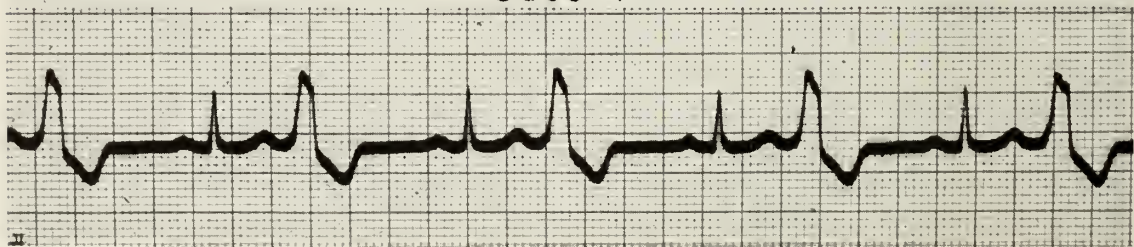
Case 2



Case 3



Case 4



### ELECTROCARDIOGRAM OF THE MONTH

#### Ventricular Ectopic Beats

DALE GROOM, M. D.

From the Dept. of Medicine.

Several types of ectopic beats arising in the ventricles are illustrated in the following four cases.

Case 1—The chief complaint of a 40 year old mother whose only son had been killed in an accident the previous year was that of "heart attacks" with palpitation. Following the tragic event she had become anxious and depressed, had lost her appetite and some 40 pounds of weight, slept fitfully, and on one occasion had attempted suicide. Associated with her attacks of cardiac arrhythmia, which occasionally

lasted an hour or more, were a feeling of constriction in the throat and vague pains in the left chest. The palpitation itself evoked further anxiety and symptoms, including what she described as shortness of breath and numbness and tingling of the hands and feet. Thus was set up a vicious cycle.

When no evidence of organic heart disease was found on examination, and after the patient's symptoms were observed to come on during runs of premature beats, she was treated with quinidine and much reassurance regarding the functional nature of her arrhythmia and hyperventilation syndrome.

Case 2 is that of an elderly man with similar symptoms of palpitation and dyspnea, unrelated to exertion. His electrocardiogram and cardiac examination were essentially normal except for the arrhythmia which had been observed intermittently for several years.

Case 3—This strip of lead III was recorded on a 51 year old patient with generalized cardiac enlargement, tachycardia which persisted in spite of the usual measures of treatment for congestive failure, and extremely low voltage of the QRS complexes in all leads of his electrocardiograms. His illness had been a progressive one over a period of four years. Although the arrhythmia was amenable to control the patient died two weeks later, presumably of diffuse myocardial disease of unknown etiology.

Case 4—A resting electrocardiogram on this middle-aged business man showed no abnormality other than occasional ectopic beats from a single ventricular focus. Because of his recent history of a pain in the mid-chest radiating down both arms, coming on during the exertion of a hunting expedition and lasting a minute or so, he was subjected to a Master test. No pain was induced by the test but an electrocardiogram recorded immediately upon completion of the exercise revealed ST segment depressions of 1 to 2 mm. in the left precordial leads and the bigeminal rhythm shown in this strip of lead II. He had not been taking any medication. The positive Master test and the prompt relief he obtained from nitroglycerin on subsequent attacks of pain bore out the clinical impression of angina pectoris.

#### *Electrocardiograms*

The tracings of all four patients depict basic sinus rhythms on which are superimposed ectopic beats of ventricular origin. They differ principally in the relationship of the ectopic to the normally conducted beats.

In the first case this strip of lead I includes two isolated ectopic complexes, each falling shortly after a sinus beat and before the next expected one, and followed by a compensatory pause. A normal cycle is dropped out each time; its P wave, if present, is obscured in the bizarre high voltage deflection of the ectopic beat. Minor variations can be observed in the P waves before and after the compensatory pauses. Also, the pauses are a little longer than usual in that the distance between the preceding and the following

sinus beats is more than two cycle lengths of the basic rhythm.

The ectopic complexes of case 2 occur precisely in the middle of every alternate normal cycle, are not followed by pauses, and seemingly leave the basic rhythm unaltered. However, the P-R interval is slightly increased after each extrasystole, making those cycles about 0.04 sec. longer than the ones which do not include an interpolated beat. The sinus rate of 60 is much slower than that of the other cases. Configuration of the two types of QRS complexes differs considerably in this lead (III) but was much the same in the precordial leads; this plus the similarity in their width suggest that the ectopic focus was in or near the ventricular septum.

The tall complexes of case 3 are more difficult to explain. At first glance they resemble ventricular ectopic beats falling at the expected time of normally conducted ones. But there appears to be a systematic relationship between their height and their timing in respect to the preceding P waves. Possibly they represent "combination complexes" from two simultaneous stimuli, or a form of accelerated conduction. The bidirectional pair is followed by a definite compensatory pause (which is brief because of the sinus tachycardia at a rate of 125.)

In case 4 the ectopic beats are coupled to normal ones by a constant interval, comprising a typical bigeminal rhythm. Each ectopic complex begins immediately at the end of the preceding T wave and replaces a normal ventricular complex. The true sinus rate is 94; every alternate P wave is obscured in the wide slurred deflection as was evident in other parts of the tracing where an occasional ectopic beat was dropped out. All the ectopic complexes are of the same shape, indicating a single focus of origin.

#### *Discussion*

Doubtless the commonest cardiac arrhythmia and one which can be disturbing to many individuals who become subjectively aware of it is that of ventricular contractions initiated by impulses from outside the normal cardiac pacemaker. The term "ectopic beats" (either atrial, nodal or ventricular, according to their site of origin) is perhaps more strictly correct than "premature beats" or "extrasystoles" since they are not necessarily premature in the cardiac rhythm nor are they actually extra in that they usually replace normally conducted cycles, leaving the total number of ventricular contractions in a given period of time unchanged. As a rule, they do fall prematurely, followed by the characteristic compensatory pause, but they may also occur at mid-phase in an uninterrupted sinus rhythm or at the expected time of normal beats provided, of course, that there is a basic regular rhythm.

So frequently are isolated "extrasystoles" observed in the electrocardiograms of normal subjects that it is reasonable to assume that nearly everyone has them at times, whether conscious of them or not. When they arise below the AV node they produce ventricular



complexes which differ from the normal ones according to the route of conduction of the ectopic stimulus through the ventricular musculature. Characteristically the complexes are wide, of high amplitude, with the QRS either slurred or notched and its T wave of opposite polarity, usually with some displacement of the ST segment. From a consideration of ventricular conduction pathways in bundle branch block<sup>1,2</sup> one can see why an ectopic beat arising in the left ventricle simulates the QRS pattern of right bundle branch block, and vice versa, while the configuration of one arising in the interventricular septum may differ little from that of the normally conducted beats.

Ventricular ectopic beats occur singly or in multiples, and in regular or irregular combinations with the cycles of the basic rhythm. The simple repetitive coupling of case 4 is termed *ventricular bigeminy*, whereas groups of three (one normal and two ectopic or two normal and one ectopic) are designated *trigeminy*, *interpolated beats* are truly extra beats which are sandwiched in the middle between the normal ones which continue to recur in their basic rhythm, uninterrupted by compensatory pauses. Ectopic beats may arise from a single focus or from multiple foci in the ventricles, and sometimes they are coupled in a bidirectional pattern with alternate beats from two foci. They commonly occur along with other arrhythmias such as atrial fibrillation, flutter and supraventricular tachycardia.

Most electrocardiographers would agree that an ectopic beat is a manifestation of increased irritability of the area of myocardium from which it originates. Beyond that assumption lie theories—and even the cause and the nature of the enhanced irritability are open to question. It is a common observation during cardiac catheterization or operations on the open heart that mechanical stimulation of an area of myocardium evokes ectopic beats from the site of stimulation. Irritability can also be increased by autonomic stimulation, by drugs (e.g. epinephrine, anesthetic agents, caffeine, digitalis), and by electrical stimulation. But whether one subscribes to the theory that ectopic stimuli activate the muscle at a phase of supernormal excitability immediately after repolarization and at about the time of the U wave, or that they are due to a re-entry phenomenon from an area of muscle which somehow becomes insulated so that the normal excitation wave reaches it sufficiently late that its activation stimulates a subsequent contraction of the surrounding normal tissue, a recognition of the refractoriness of muscle tissue following activation explains many of the observed characteristics of ectopic beats. For example, the minor P wave and P-R interval alterations following ectopic beats in the first two cases are explainable by changes in atrial excitability, and of course the well-known compensatory pause caused by omission of the succeeding normal beat is due to refractoriness induced by the premature contraction. Typically the interval between the preceding and the succeeding normally

conducted beats is double the cycle length of the basic sinus rhythm, although it may exceed this as illustrated in the first case. Observations made with esophageal leads which display P waves as much larger deflections indicate that retrograde conduction of ectopic ventricular stimuli may be much more common than supposed, for inverted P waves following or within these bizarre complexes are seldom recognizable in ordinary tracings.

Any cardiac irregularity as nearly universal as this one can scarcely be regarded as indicative in itself of disease. Too often it is observed as a functional disturbance in children and young people where the problem is that of reassuring them of its benign nature. Even beyond the age of 50 where ectopic beats are undoubtedly much more frequent, their association with emotional stress, fatigue, and stimulants such as caffeine and nicotine in susceptible individuals is well known. Certainly most people who seek medical advice on this account have no evidence of heart disease. One wonders how many so-called "cardiac neuroses" are built up around this common disturbance of rhythm.

On the other hand, ectopic beats of ventricular origin often do have special significance under certain conditions, notably in acute myocardial infarction and during general anesthesia where they may be the harbingers of the end stages of myocardial irritability, (ventricular tachycardia, flutter and fibrillation<sup>3</sup>); when they are induced or increased by exercise as in case 4, possibly due to an ischemic focus; or during treatment with digitalis where their appearance—particularly in a bigeminal rhythm indistinguishable from that of case 4—is a classical sign of digitalis toxicity.

Attention has been directed to the T wave of the succeeding normal beat with the contention that its inversion is usually associated with organic heart disease, though "post-extrasystolic T waves" may show considerable variation in normal subjects. A possible explanation for this might be the transient reduction in coronary arterial blood flow resulting from the ineffective premature contraction followed by the compensatory pause. Rarely a ventricular ectopic beat may be helpful by disclosing some electrocardiographic signs of acute infarction concealed by a left bundle branch block.

Depending upon its timing, a premature contraction may or may not have sufficient stroke output to open the semilunar valves and produce a peripheral pulse beat and a second heart sound. The compensatory pause then allows prolonged ventricular filling and an inordinately large stroke volume of the following cycle which may account for the familiar thump in the chest. Runs of these beats can cause more distressing symptoms but generally the resultant impairment of circulation is negligible in comparison to the anxiety they arouse—unless the cardiac reserve is already severely limited.

The statement is often made that multifocal ven-



tricular extrasystoles are of more ominous significance than those from a single focus. Insofar as they indicate a diffuse hyper-irritability of the myocardium this may be right in many cases. An important exception, however, is the localized lesion of infarction or ischemia which notoriously emits stimuli capable of grossly disrupting the cardiac rhythm. Treatment of the arrhythmia in such cases may be life-saving. It is now accepted practice to include quinidine or procaine-amide, often with supplementary potassium, in the treatment of all patients with acute myocardial

infarction who manifest ventricular ectopic beats.

In the absence of evidence of organic heart disease or of electrolyte or endocrine disorder, premature contractions are usually of no real significance and seldom warrant treatment beyond that of reassurance.

#### REFERENCES

1. Groom, Dale: ECG of the Month, J. South Carolina Med. Association. 54:82 (March 1958)
2. Groom, Dale: ECG of the Month, J. South Carolina Med. Association. 54:284 (August 1958)
3. Groom, Dale: ECG of the Month, J. South Carolina Med. Association. 52:53 (Feb. 1956)

*Physicians and Progress in the Public Health.* G. E. McDaniel (Columbia). South. M. J. 52:523. (May 1959)

Physicians in all fields of practice have contributed much to the improvement of the total public health by their leadership in civic, religious and other community activities as well as by their professional services to the community. The increasing criticism of physicians individually and collectively through recent years can be attributed in part to: (1) a lack of sufficient time devoted to a discussion with the patient of his total problem; (2) the increase in specialization with increased use of scientific knowledge but loss of some of the art of practice; and (3) the increase in the number of lay organizations actively interested in medical fields but without adequately recognized medical leadership. Changing populations and environments bring changing public health problems. The private and public health practice of medicine in this country can as adequately care for the future health problems of the chronically ill and aging as it has for the acute communicable disease ones of the past. The medical profession must, however, seek and aggressively assume leadership in solving all medical problems.

*Effect of hemorrhage on hepatic blood flow determined by radioactive colloidal chromic phosphate removal.* C. M. Smythe. Circ. Res. 1:268, 1959.

Hepatic blood flow simultaneously determined by the bromsulfalein removal method of Bradley and the radioactive colloidal chromic phosphate disappearance method of Dobson in 18 anesthetized dogs averaged 38.7 and 38.3 ml./kg./min. respectively. The mean half time for radioactive colloidal chromic phosphate disappearance slope was 1.6 min.

In response to an acute hemorrhage of 25 ml./kg., hepatic blood fell from 42.3 to 35.4 ml./kg./min. by the radioactive colloidal chromic phosphate method in a group of 10 dogs. This change is not statistically significant. Half time increased from 1.6 to 1.9 min. in these animals.

Arterial hypotension at a level of 40 mm. Hg for 30 min. induced by hemorrhage (mean 33 ml./kg.) was followed by a decrease of hepatic blood flow from 43.4 to 20.8 ml./kg./min. by the radioactive colloidal chromic phosphate method in 4 dogs. Half time increased from 1.4 to 2.4 min.

Radiocolloidal disappearance rates may depend upon other variables than hepatic blood flow.

C. M. Smythe, M. D.



## PRESIDENT'S PAGE

Doctor—You with the medical degree not only have to read several medical periodicals a month to keep up with the modern trends and new scientific discoveries, but you also must defend your individual rights. If you intend to practice with a group, clinic, partnership or alone, you better get busy and let your Congressmen and Senators know how you feel and stand on the Forand Bill. An expression of opinion with an even temper is an American custom that doctors are not prone to use—being too busy is no reason, but an excuse, and a very poor one at that.

There is a measure in the House of Representatives called the Forand Bill, HR 4700—that would be worth your while to not only read, but study. The essence of the Forand Bill is to allow all those who have Social Security medical treatment and hospitalization at the expense of the Government. As I interpret the Forand Bill, it will engulf medicine and its practice, except for a few general practitioners and pediatricians. This is a vicious maneuver and does away with the freedom of choice, and to a larger extent it abandons what the 19th and 20th century doctor in the United States knows as the American way of life. Fellows, if its worth living, it is worth fighting for—if you have gone through the rigors of medicine and obtained your degree, then you have the intestinal fortitude to defend your rights from these creatures who take pleasure in spending your hard earned tax money.

The method to pay for this panaceic dragon is to increase the social security taxes—sounds plausible doesn't it, but the best argument for social security among the doctors is that we are paying for it, but not reaping any of the benefits. Well, I will take up this subject another time, as it is easy to prescribe a sedative and whitewash the subject at hand. Gentlemen, do not let our Congressional Representatives lull and dull us into a restful peace by passing this Forand Bill. Get active—assert yourselves—explain to them this measure is full of poisonous venom and there is a much better method of living than through the Welfare State, which we are all too fast approaching.

William Weston, Jr.

# Editorials

---

## HOT WEATHER VAPOURS

It is to be noted with some relief that the hucksters on the television programs who expound the virtues of various modifications of plain old aspirin have at least learned to say "stomachs" instead of "stummicks."—Not that we look at the silly programs very often, but occasionally we get caught, just as we catch ourselves reading a who-done-it every little while to clear the fog out of the mind. We would be just as happy if no one would mention the fact that maybe the fog is never completely cleared. Anyhow, we were looking at a rather good suspense detective story the other night, one made by our British cousins, and having to do with a villainous plot whereby one Britisher was trying to do in another by planting a black widow spider in his sample case. In due course, the plot was unwound and the intended victim escaped. What startled us was the size of the black widow spider which emerged from the case. He or she was no smaller than a teacup in diameter, with great hairy legs and a fearsome appearance, not at all like the neat little black widow with the hour-glass design which frequents some of the more personalized habitats of our local population. Maybe our British friends don't know a black widow from a tarantula, or perhaps we were not sure in identifying the tarantula for what it was. Anyhow it wasn't a black widow. The marvels of television never cease.

Reading a scientific paper the other day, the reader came across an expression by an eminent surgeon, referring to the status of the brain, to the effect that there was no "worthwhile atrophy". Since when has atrophy ever become worthwhile?—We understand that there were only twelve verified cases of typhoid fever reported for the whole state last year. If this represents honest reporting, it might seem that the time might be approaching when the public might be relieved of the burden of taking typhoid vaccine. So far our Public Health authorities have not gone so

far as to say that we might neglect this old precaution.—Cigarettes may still be "coffin nails" for some of us, but the foul exhaust fumes from a big truck ahead on the road are enough to nail the coffin, bury the body, and erect a handsome tombstone. Wonder if anything exists that might be known as Diesel's Cancer of the lung?

---

## WRITE YOUR OWN MORAL

For reasons not yet ascertained, it came over one of the professors at The Medical College that he might include in his questions for examination in his particular branch the query, "Who was Osler?". To the surprise of many of the grey-beards of the community, no one in the whole section seemed to know who Osler was.

It came to pass that some days later some students and faculty members were ascending to the top reaches of the hospital in the elevator and engaged in some mild comment about the Osler incident. When one of the students was chided as to his lack of knowledge, he remarked that he had not come to college to learn about people, but to learn about diseases, and implied that for all practical purposes he neither knew nor cared *who* Osler was. Whereupon one of the faculty members asked the student if he knew what Osler's Disease was, which query seemed to throw the student into a case of acute embarrassment.

For those who come to Medical School to study diseases and not a profession, with all the implications of its background and tradition, we do not have a great deal of sympathy; but it might be said that their number is increasing to a somewhat disturbing extent, and that it might seem to be a concern of medical teaching that some greater effort is made towards inculcating something more in these youthful minds than the ability to recognize a series of symptoms and to prescribe the currently popular drug.



**SOUTH CAROLINA MEDICAL  
ASSOCIATION COMMITTEES, 1959-1960**

**1. COMMITTEE ON SCIENTIFIC PRO-  
GRAM**

Dr. William H. Prioleau, Charleston  
(Chairman)  
Dr. Dale Groom, Charleston  
Dr. George Durst, Sullivan's Island  
Dr. George H. Bunch, Columbia  
Dr. Robert Wilson, Charleston  
(Ex-officio)  
Dr. William Weston, Jr., Columbia  
(Ex-officio)

**2. COMMITTEE ON PUBLIC HEALTH**

Dr. W. Wyman King, Batesburg  
(Chairman)  
Dr. Douglas Jennings, Bennettsville  
Dr. Wallace D. McNair, Aiken  
Dr. Harry Mustard, Boykin  
Dr. Casper Wiggins, Greenwood

**3. MEMORIAL COMMITTEE**

Dr. Martin M. Teague, Laurens  
Dr. Thomas G. Goldsmith, Greenville  
(Chairman)  
Dr. E. Kenneth Aycock, Columbia

**4. COMMITTEE ON MATERNAL  
HEALTH (WELFARE)**

Dr. Edward J. Dennis, Charleston  
(Chairman)  
Dr. Horace M. Whitworth, Greenville  
Dr. Richard Johnston, St. George  
Dr. James Williamson, Columbia  
Dr. Swift Black, Dillon  
Dr. Hilla Sheriff (Ex-officio)

**5. COMMITTEE ON CANCER**

Dr. James R. Young, Anderson  
(Chairman)  
Dr. Leland J. Brannon, Columbia  
Dr. Edward S. Cardwell, Columbia  
Dr. H. R. Pratt-Thomas, Charleston  
Dr. Thomas A. Pitts, Columbia  
Dr. Alton C. Brown, Rock Hill  
Dr. Percy D. Hay, Jr., Florence

**6. COMMITTEE ON LEGISLATION AND  
PUBLIC POLICY**

Dr. Frank C. Owens, Columbia  
(Chairman)  
Dr. Bachman Smith, Charleston  
Dr. James E. Gressette, Orangeburg  
Dr. C. Tucker Weston, Columbia  
Dr. Chas R. May, Jr., Bennettsville  
Dr. Harold E. Jervey, Columbia  
Dr. Joseph I. Converse, Greenville  
Dr. Alton C. Brown, Clinie Bldg., Rock  
Hill  
Dr. George H. Orvin, Charleston  
Ex Officio: Mr. M. L. Meadors, Florence

**7. COMMITTEE ON INFANT AND  
CHILD HEALTH**

	<i>Term of Office</i>	<i>Expires</i>
(Pediatricians)		
Fred F. Adams, Jr.	3 years	1962
Ethel M. Madden	2 years	1961
Walter Moore Hart	1 year	1960
(Obstetricians)		
Patricia A. Carter	3 years	1962
Thomas G. Herbert, Jr.	2 years	1961
William A. Hart	1 year	1960
(General Practitioners)		
Samuel O. Cantey	3 years	1962
Joseph D. Thomas	2 years	1961
Horace M. Whitworth	1 year	1960

**8. COMMITTEE ON WELFARE AND RE-  
HABILITATION**

Dr. Ben N. Miller, Columbia (Chairman)  
Dr. John A. Siegling, Charleston  
Dr. John K. Webb, Greenville  
Dr. Roderick Macdonald, Rock Hill  
Dr. Weston Cook, Columbia

**9. COMMITTEE ON LIAISON WITH  
ALLIED PROFESSIONS**

Dr. Henry C. Robertson, Charleston  
(Chairman)  
Dr. Edward M. Allen, Florence  
Dr. W. O. Whetsell, Orangeburg  
Dr. Harold E. Jervey, Jr., Columbia  
Dr. Charles R. May, Bennettsville  
Mr. M. L. Meadors, Florence (Ex-officio)

**10. COMMITTEE ON SCHOOL HEALTH**

Dr. John R. Paul, Jr., Charleston  
(Chairman)  
Dr. Henry Moore, Columbia  
Dr. James Timmons, Columbia  
Dr. John M. Preston, Columbia  
Dr. Hilla Sheriff, Columbia (Ex-officio)  
Dr. H. Earle Furman, Greenville

**11. COMMITTEE ON CARE OF THE  
PATIENT**

Dr. Joseph H. Cutchins, Easley  
(Chairman)  
Dr. Weston C. Cook, Columbia  
Dr. Sam Lowe, Rock Hill

**12. ADVISORY COUNCIL TO WOMAN'S  
AUXILIARY**

Dr. R. L. Crawford, Lancaster  
(Chairman)  
Dr. John Fleming, Spartanburg  
Dr. Ben Stands, Columbia  
Ex Officio: Mr. M. L. Meadors, Florence

**13. COMMITTEE ON MEDICAL EDUCA-  
TION FOUNDATION**

Dr. Edwin Boyle, Charleston (Chairman)  
Dr. R. L. Crawford, Lancaster  
Dr. Henry L. Laffitte, Allendale  
Dr. Keitt Smith, Greenville  
Dr. Herbert A. Gross, Barnwell

14. *COMMITTEE ON MEDICAL AND HOSPITAL INSURANCE CON-TRACTS*

Dr. Clay Evatt, Charleston (Chairman)  
Dr. Richard W. Hanckel  
Dr. F. C. Owens, Columbia  
Dr. Charles Zemp, Camden  
Dr. Joe Cain, Mullins

15. *COMMITTEE ON RURAL HEALTH*

Dr. John C. Buchanan, Jr., Winnsboro (Chairman)  
Dr. Harold S. Gilmore, Nichols  
Dr. Harry Davis, Sumter  
Dr. Edward R. Barber, Lancaster  
Dr. Franklin L. Geiger, Columbia (Ex officio)

16. *COMMITTEE ON HISTORICAL MEDICINE*

Dr. Joseph I. Waring, Charleston (Chairman)  
Dr. Chapman Milling, Columbia  
Dr. R. M. Pollitzer, Greenville  
Dr. R. Eugene Zemp, Columbia  
Dr. William A. Boyd, Columbia

17. *COMMITTEE ON CIVIL DEFENSE*

Dr. Charles N. Wyatt, Greenville (Chairman)  
Dr. R. Y. Wescoat, Lancaster  
Dr. Bachman S. Smith, Jr., Charleston  
Dr. William C. Herbert, Jr., Spartanburg  
Dr. Manly Hutcheson, Columbia

18. *MEDICAL ADVISORY COMMITTEE TO THE CRIPPLED CHILDREN'S SOCIETY OF SOUTH CAROLINA, INC.*

Dr. Sam G. Lowe, Jr., Rock Hill, 2 years  
Dr. John Bell, Greenwood, 2 years  
Dr. T. G. Goldsmith, Greenville, 2 years  
Dr. Julian P. Price, Florence, 2 years  
Dr. Philip McNair, Aiken, 2 years  
Dr. Joseph I. Waring, Charleston, 1 year  
Dr. John Arthur Siegling, Charleston, 1 year  
Dr. William Weston, Jr., Columbia, 1 year  
Dr. Charles Hanna, Spartanburg, 1 year  
Dr. James T. Green, Columbia, 1 year  
Dr. George Dean Johnson, Spartanburg, 3 years  
Dr. Fred E. Kredel, Charleston, 3 years  
Dr. Harry W. Mims, Charleston, 3 years  
Dr. C. Guy Castles, Columbia, 3 years  
Dr. Walter M. Hart, Florence, 3 years  
Dr. James W. Jervey, Greenville, 3 years  
Co-Chairman:  
Dr. Joseph I. Waring, Charleston  
Dr. William Weston, Jr., Columbia

19. *COMMITTEE ON INDUSTRIAL MEDICINE*

Dr. W. W. Edwards, Greenville (Chairman)

Dr. Louis G. Llewelyn, Lancaster  
Dr. John A. Siegling, Charleston  
Dr. Frederick P. Shepherd, Aiken

20. *COMMITTEE ON CORONERS-MEDICAL EXAMINERS*

Dr. H. R. Pratt-Thomas, Charleston (Chairman)

Dr. D. Strother Pope, Columbia  
Dr. R. F. Zeigler, Florence  
Dr. Robert Solomon, Moneks Corner  
Dr. Wm. Hunter, Clemson

21. *COMMITTEE ON CERTIFICATION OF PSYCHOLOGISTS*

Dr. Joe Freed, Columbia (Chairman)  
Dr. John M. Brewer, Kershaw  
Dr. F. C. Owens, Columbia  
Dr. Jas. P. Galloway, Columbia (Fee Schedule Committee is a special committee)

W. W. Edwards

F. C. Owens

John Siegling

George Bunch

Medical Advisory Committee to Selective Service

Dr. Frank C. Owens, Chairman

---

**MINUTES OF COUNCIL MEETING**

Columbia, S. C. May 12, 1959

The first meeting of Council in conjunction with the Annual Meeting of the Association was called to order by the Chairman, Dr. J. P. Cain at 8:30 a. m. May 12, 1959. All members of Council were present except for the Vice-Chairman, detained because of illness.

After considerable discussion the minutes of the meeting of November 19, 1958 were approved as read and as published.

In regard to the minutes of the meeting of February 25, 1959, Dr. Weston requested that the Principles of Medical Ethics of the American Medical Association with reference to the practice of dispensing lenses by ophthalmologists, be included in the minutes. Chapter 1, Section 8 of the 1955 edition, read as follows:

"It is not unethical for a physician to prescribe or supply drugs, remedies, or appliances as long as there is no exploitation of the patient." This was superseded in 1957 at the meeting of the House of Delegates at New York, and section 7 of the revision of the present statement of principles reads as follows:

"In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be com-

mensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interest of the patient." Dr. Weston further stated that this practice is not to be considered unethical when the ophthalmologist is located in a community where there is no available optician.

After considerable discussion, the Secretary was requested to correct the minutes and the matter of ethics referred to the Mediation Committee for their report to Council.

Dr. Ben Miller, Chairman of the Committee to Study the Attitude of the South Carolina Physicians Regarding Social Security, reported on the recommendation of his committee. He further stated that of 1400 inquiries sent out, 989 had been returned with 424 in favor of Social Security for physicians and 439 opposed. When the question was posed as to approval of Social Security on a voluntary basis, 780 were in favor and 200 were opposed. On motion this report was directed to be brought to the attention of the House of Delegates.

The Editor of the Journal, Dr. J. I. Waring, then made his report and it was directed that the Newsletter be continued to be published whenever necessary and indicated.

Dr. O. B. Mayer, Chairman of the Committee to Study the Question of a Permanent Home for the Association, reported to Council with certain recommendations. After considerable discussion it was moved that his report be received as information and referred to the House of Delegates without recommendation.

Dr. J. H. Stokes, Treasurer, gave his report which was received as information and the thanks of the Council was extended to him for his work. He also presented a letter from the representative of the Student American Medical Association thanking the Association for its support in the work of this student activity.

Dr. Frank Owens gave a supplemental report regarding the work of the Legislative Committee, and his report of the Medical Advisory Committee to Selective Service. These were received as information and referred to the House of Delegates.

Mr. M. L. Meadors, Executive Secretary, gave his report. After some discussion of the Resolutions to be offered by the Spartanburg County Medical Society, the Executive Secretary was instructed to notify the Councilor of the District and the President of the Medical Society in the event of any impending local legislation in the future.

The report of the Secretary was read and received as information.

Dr. H. C. Robertson, Jr., Chairman of a Committee to study the investment policy of the Association, reported on the work of this committee. This was received as information, and the Committee was

instructed to bring specific recommendations for investment to Council at the meeting on May 13th.

Dr. Bachman Smith read the report of Dr. Charles Wyatt, Chairman of the Committee on Civil Defense which was adopted and the thanks of the Association was extended to Dr. Wyatt for his work in their behalf in this regard. The Committee, on recommendation of Dr. Wyatt, was henceforth discontinued.

Dr. George D. Johnson gave a report for the South Carolina Medical Care Plan and announced that a policy for elderly individuals would be presented to the meeting of the Plan for approval. A recommendation for the establishment of adjudication committees, under the Chairmanship of the Councilor from each district, was approved. Dr. Johnson then announced nominations for the Board of Directors for the South Carolina Medical Care Plan as follows: (1) To succeed themselves: Mr. F. S. Adams, Mr. W. F. May, Mr. M. L. Meadors, Dr. J. A. Siegling, and Dr. Wyman King. (2) To fill the unexpired term of Mr. Graham Segars, resigned, to serve until 1961: D. B. Ellis of Dillon, S. C. (3) Dr. W. West Simmons, Greenville, S. C. (4) It was announced that Dr. William Weston, Jr. President of the Association would serve as ex-officio.

Dr. J. I. Waring reported on the activities of the Director of the Public Relations Committee and its organization to date. His report was accepted and it was recommended that a total of \$3500.00 be expended for the work of this committee, of which \$1200.00 would be for salary for the Director and \$2300.00 would be for actual expenses incurred.

Dr. J. P. Cain then gave his report as Chairman of Council, to be presented to the meeting of the House of Delegates.

The Secretary read a letter from Dr. Thomas Parker, Chairman of the AAPS Essay Contest, and the Council approved the continuation of its support for this contest, in the amount of money previously designated.

The Secretary called the attention of Council to the vacancy on the Hospital Advisory Council, occasioned by the expiration of the term of Dr. William Cantey of Columbia, S. C. Attention of Council was also called to the vacancies on the Medical Advisory Panel to the S. C. Industrial Commission, and the following nominations were made.

#### Pathologists:

M. S. Moore	Charleston
E. S. Cardwell	Columbia
D. J. Grainer	Florence
E. E. McKee	Charleston
H. W. May	Greenwood

#### Radiologists:

S. W. Lippincott	Charleston
J. F. C. Hunter	Florence
Henry Plenge	Spartanburg
Ray Russell	Conway
Bill Matthews	Rock Hill



## Physicians (Occupational Diseases)

Frank Owens ----- Columbia  
Rip LaRoehe ----- Camden  
W. W. Edwards ----- Greenville  
I. G. Linton ----- Charleston  
Tucker Weston ----- Columbia

The Secretary read a letter from Dr. W. A. Smith, Charleston regarding the establishment of a fund for the care of indigent physicians. Also the Secretary read letters from the Senators regarding their stand on the Keogh-Simpson Bill, HR-10, now before the United States Senate. A resolution regarding the action of the Wisconsin Medical Association was read and referred to the House.

Council then nominated Dr. J. H. Stokes as Treasurer of the Association for the coming year.

The following were approved as nominations for the Mediation Committee to be elected by the House of Delegates:

Third District:  
Dr. M. M. Teague  
Dr. R. C. Christian  
Sixth District:  
Dr. J. Owens  
Dr. S. Cantey  
Ninth District:  
Dr. Harold Hope  
Dr. James Sanders

A letter from Dr. B. O. Whitten was read but action on this situation was deferred to a subsequent meeting of Council.

The meeting was then adjourned.

Respectfully submitted,  
Robert Wilson, M. D. Secretary

## MINUTES OF COUNCIL MEETING

Columbia, S. C. May 13, 1959

Council reconvened at 8 a. m. on the morning of May 13, 1959. A quorum was present and the meeting was called to order by the Chairman, Dr. J. P. Cain.

The rough minutes of the meeting of May 12, 1959 were read and approved.

Dr. H. C. Robertson, Chairman of the Committee to study the investment policy of the Association, reported that his committee recommended that the accumulated reserve of the Association as listed in the 1958 audit be reinvested as follows:

1. Ten thousand (\$10,000.00) dollars be left in the Peoples Federal Savings and Loan Association.
2. The remainder of the general reserve, not including the Permanent Home Building Fund, be invested in the Investors' Mutual Fund, Inc. of Investor's Diversified Services, Inc.
3. Any General Reserve Funds accumulate in the future, not including the Permanent Home Building Fund, shall be invested as in Paragraph 2, above.
4. The permanent Home Building Fund, both those funds on hand and those which may accumulate, be

invested in the Investors Stock Fund, Inc., of Investors' Diversified Services, Inc.

5. The Committee recommends that Council pass a resolution authorizing the Treasurer to proceed according to the above directions.

6. Finally, the Committee recommends that a committee of Council, similar to this be continued with authorization to supervise future investments of the Association.

This report was amended to include the following policy.

A. To reinvest all capital distributions.

B. To reinvest all income and capital distributions in the Permanent Home Building Fund; and

C. To use the income from the remainder of invested funds only if it becomes necessary for the work of the Association.

This report as amended was adopted.

After the adoption of the report of the Investment Committee the following Resolution was adopted:

RESOLVED, That the Council of the South Carolina Medical Association authorize the Treasurer of the Association, Dr. J. H. Stokes, to proceed with the investment of the funds of the Association in the Securities of Investors Diversified Services, Inc. in accordance with the investment policies of the Association. This resolution was likewise adopted.

In regard to Dr. Whitten's letter concerning the situation at Whitten Village, Dr. D. L. Smith announced that Dr. George Wilkinson had secured another competent physician to help in this work. The Chairman of Council was authorized to appoint a committee of between 3 and 5 members of the Association, to consult with Dr. Whitten regarding this situation.

At long last the minutes of the meeting of February 25, 1959 were approved as corrected.

Council then received reports from members of the Woman's Auxiliary Mrs. George Orvin, President, Mrs. John G. Ramsbottom, President-Elect, and Mrs. Murray Wilkins, Treasurer. Never before in the history of the Association had three such charming women and such small hats been the guests of Council.

The meeting was then adjourned.

Respectfully submitted,  
Robert Wilson, M. D. Secretary

## MINUTES OF COUNCIL MEETING

Columbia, S. C. May 14, 1959

Council reconvened at 8:00 a. m. at the Columbia Hotel, Columbia, S. C. The meeting was called to order by the Chairman, Dr. J. P. Cain. Members present included Drs. R. L. Crawford, Drs. Gressette, Bachman Smith, Burnside, Wilson, Perry, Waring, Evatt, Weston and Mr. M. L. Meadors.

The rough minutes of the meeting of May 13th were read and approved.

As this was a reorganization meeting the following officers were elected:

Chairman, Dr. Charles N. Wyatt

Vice Chairman, Dr. Bachman S. Smith, Jr.

Clerk, Dr. William Perry.

After some discussion regarding the next meeting of the Association in Myrtle Beach, Council directed the President, Dr. William Weston and the Executive Secretary, Mr. M. L. Meadors to make suitable arrangements for the second or third week in May 1960.

Council then adjourned, until called at a special meeting by the Chairman.

Respectfully submitted,

Robert Wilson, M. D. Secretary

## REPORT OF DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION

The 108th annual meeting of the A. M. A. was held in Atlantic City in June. It was well attended by over 12,000 doctors and a total of 28,000 other guests. This count was made before the meeting had reached the last day.

The President of the United States addressed the physicians and their guests in the Convention Hall Auditorium. He stressed the danger of inflation, spending more than the federal government received and was happy to know that physicians had taken steps to provide medical care at a reasonable fee to people over 65.

Dr. Louis M. Orr, urologist from Orlando, Fla., was given the oath of office by Dr. Leonard M. Larsen, Chairman of Council. Dr. Vincent Askey, internist from Los Angeles, and Speaker of the House of Delegates became President-elect and will take office in Miami in 1960. Dr. Gundersen stressed medical care for people over 65. Referring to the need for keeping abreast of medical advances he said "To me any physician who is not making an effort to keep abreast of medical knowledge blackens the eye of American Medicine just as much as the physician who overcharges".

Dr. Carl V. Moore received the Joseph Goldberger Award for his work on Iron Deficiency Anemia.

Smith, Kline, and French received an award marking ten years of television in medicine. Over 1,000 surgical procedures and 26 deliveries have been demonstrated to physicians by television. Over 600,000 physicians have seen the demonstrations.

The Distinguished Service Award was given to Dr. Michael De Bakey for his work on heart and blood vessel operations.

The student A. M. A. was ably represented by Bill Kirkham of the University of Oklahoma, and Henry Lamkin of the University of Indiana. There are nearly 56,000 members of this organization and it has an annual budget of almost \$500,000.00. The student A. M. A. repaid \$5,000.00 of the loan the A. M. A. made to it for organization. The student A. M. A. is disappointed at its failure to obtain funds for its medi-

cal education foundation. (The A. M. A. is actively trying to establish a loan fund for medical students and perhaps by the December meeting something will be announced.)

The questions of osteopathy and the relation of doctors to osteopaths were discussed at length. It is hard for us in South Carolina to realize that in some states osteopaths have the same privilege to practice that a physician does. They also, in some places, are the only practitioners to take care of the sick. In still other places their hospitals are striving for recognition by the Commission on Joint Accreditation. As finally passed the resolution arrives at the following results:

(a) All voluntary associations between doctors of medicine and those who practice a system of healing not based on scientific principles are unethical.

(b) It is ethical for doctors of medicine to teach osteopathic students who seek to improve their knowledge provided such action is not contrary to the policy of the constituent medical associations.

(c) Medical doctors may teach in an osteopathic school which is in the process of conversion to a regular medical school under the supervision of the Council on Medical Education and Hospitals.

(c) A liaison committee is to be appointed by the Board of Trustees to meet with representatives of the A. O. A. to consider problems of mutual concern.

Reference Committee on Reports of the Board of Trustees

Financial statement: The A. M. A.'s financial condition remains in excellent condition. There are almost, in the surplus, enough available funds to operate the A. M. A. for one year.

Perhaps as a side result of the splendid financial condition of our A. M. A. all members of the A. M. A. will receive in addition to the A. M. A. *Journal*, *Today's Health* and a specialty journal of their choice.

The Annual meeting in 1962 will be held in Chicago June 11-15.

The Committee on Amphetamines and Athletics has been discharged after a thorough and careful study and report. The committee condemned the use of amphetamines in all types of sports.

The Board of Trustees has been instructed to study the (a) need for loans to medical students; (b) method; (c) and extent of the loans if any.

In some states examination of dead human bodies is entirely unsatisfactory. California has recently passed a modern law. If the law in South Carolina conflicts with the proper examination by a coroner or medical examiner efforts to correct it should be made.

The House of Delegates wholeheartedly endorsed the idea of a postage stamp publicizing the tremendous number of traffic deaths.

California, after struggling for two years, has a commission appointed by the governor to determine the validity of the various cancer cures that crop up from time to time.

Further efforts to care for people over 65 will be

continued. Remarkable progress, especially in the Blue Shield Plans, has been made. Almost every plan now has a method whereby older people with modest incomes may be taken care of by physicians for a modest fee.

The hot subject of Social Security for physicians came up again. Five physicians spoke in favor of it; twenty eight spoke against it. It was urged that physicians inform themselves not only of the principle involved but also the money involved before making a hasty decision. It was further suggested that tape recordings, slides, talks be used at the local level to better acquaint physicians with what social security is and is not. Following are some facts that are repeated here for the benefit of those who might not be aware of them.

(1) The United States Supreme Court has held that Social Security is not an "insurance" program.

(2) Social Security is basically a tax program and the tax payer has no vested right in the benefits.

(3) Under social security there is no contract between the individual and the government.

(4) Under social security the tax rate and the benefit structure may be changed at any time by legislative action, whereas an insurance contract has a fixed premium and a fixed benefit to be paid at a specific time or event.

Furthermore out of 242,625 doctors of medicine in the United States, less than 4% are retired. Since physicians rarely retire at 65 most of them would not be eligible for social security till the age of 72, although they would continue to pay the tax.

A change of policy of the A. M. A. at this time would jeopardize our struggle against socialism in the form of the Forand Bill and other similar loans.

Social Security for physicians was again soundly defeated. At the same time every physician is urged to write his senators and congressmen to urge passage of the Keogh-Simpson Bill.

On the preparation for General Practice there was uniform agreement that a two year rotating internship was most desirable. At the same time enough flexibility is to be allowed to best prepare a medical student for general practice.

Physicians in all communities were urged to aid in every possible way the establishment of good liaison between physicians and nursing education. At the national level the relationship is excellent and it is hoped that at the local level the same good relationship holds.

It has been urged by a liaison committee between the A. M. A. and the American Bar Association that state and county medical societies and hospital associations form joint committees in an effort to prevent occasions that might lead to mal-practice suits.

Doctors are notable for their reluctance to discipline a fellow practitioner. The Medical Disciplinary Committee has issued its first report and should be read with interest by every physician.

The work of the American Medical Education Foundation received many praises. All physicians should be proud of it and support it. It is the first organization through which a profession has realized its financial responsibility to its schools. The quality of medical education has been improved and in the eyes of laymen physicians have proven their sincerity in advocating more and better teaching facilities for medical students.

Perhaps the most important single report was that of the Reference Committee to Consider the Report of the Commission on Medical Plans.

This same committee has remained one since it was appointed before the meeting in Minneapolis. It has done a remarkable job in that there were so many facets to cover and so much printed material to digest and consolidate. The material studied was included in a booklet of 95 pages of two columns each. Another, as large or larger, booklet containing purely statistical data was considered also. No effort will be made to give in detail the report of the committee. A summary of its report might include a few high spots.

(a) The principal objective is the highest quality medical care for all people.

(b) Free choice of physician is an important factor in the provision of good medical care. The medical profession should discharge more vigorously its self-imposed responsibility for assuring its competency of physicians' services and their profession at a cost which people can afford.

(c) Those who receive medical care benefits as a result of collective bargaining should have the widest possible choice from among medical care plans for the provision of such care.

(d) The A. M. A. believes that the free choice of physicians is the right of every individual and one which he should be free to exercise as he chooses. Each individual should be accorded the privilege to select and change his preferred system of medical care and the A. M. A. vigorously supports the right of the individual to choose between these alternatives.

This committee urges further study into the socio-economic problems of physicians and the practice of medicine. Since the public seems to prefer plans where a wide choice of physicians is allowed as opposed to a closed panel practice, medical associations and societies are urged to continue to develop and improve Blue Shield Plans.

#### Suggestions for

##### Constituent Medical Associations

1. To determine the law relating to human dead bodies in South Carolina especially as regards post-mortems, coroners, medical examinations, and the possible removal of eyes and aortas, etc., for banks. (Model law can be obtained from American Medical Association)
2. California has made into law a bill against quackery as far as cancer is concerned. A commission to



study treatments where drugs and or appliances are used has been set up.

3. The component medical associations and county societies are urged to take an active part in the training and education of nurses. There is a very close tie up at national levels.
4. It is urged that state and county hospital associations and medical societies be encouraged to assist in the establishment of Hospital Medico-Legal Education and Review Committees to reduce the number as well as possibility of malpractice suits.

George Dean Johnson, M. D.

---

## NEWS

---

John W. Rheney, Jr., M. D. announces his association with Marion R. Caughman, M. D. in the practice of pediatrics at 620 Carolina, N. E., Orangeburg, South Carolina.

Wayne C. Brady, M. D. announces the removal of his office from 701 Pendleton Street to 119 Mallard Street, Greenville, South Carolina on July 1, 1959. Practice limited to orthopedic surgery.

One of the South's largest and most comprehensive postgraduate medical assemblies will be conducted in Birmingham, Alabama, September 13-15, 1959.

Some 41,000 leading Southern physicians have been invited to the second annual Medical Progress Assembly which will feature a speaking faculty comprised of 16 nationally-recognized physicians in various specialties.

The Assembly will be presented by the Birmingham Academy of Medicine and will be held in the Dinkler-Tutwiler Hotel.

Hundreds of physicians from the Southeast took part in the Assembly last year and both the speaking faculty, subjects and exhibits have been expanded this year.

The following physicians from South Carolina received their certificates of Fellowship in the American College of Chest Physicians at the Convocation on June 4: George Brunson, Columbia; E. Walter Masters, Columbia; and George H. Bunch, Columbia.

---

### POLIO SITUATION IN SOUTH CAROLINA

State Board of Health statistics would indicate that in June 1959 there were more than 100,000 children under five years of age who have not had vaccine, according to Dr. G. E. McDaniel, Director of the Division of Disease Control. Many others in this age group should receive the third inoculation. There is indication also that the same thing is true in this state that surveys in other states show—that a large percentage of unvaccinated children are in the lower

socio-economic groups.

Once again this year the State Board of Health will have poliomyelitis vaccine for distribution to the counties for immunization of these preschool children, said Dr. McDaniel. It is hoped that these unimmunized children can be given inoculations before the polio season reaches its peak. There is need to focus publicity and attention toward these lower socio-economic groups in order to reach these children for immunization, continued Dr. McDaniel.

There have been seven cases of polio reported in South Carolina to date, Dr. McDaniel said. Of these, two were white and five colored. Six were paralytic and one unspecified. Only one of these children had had any vaccine.

---

### HOSPITAL CONSTRUCTION

---

The initial project construction application has been approved for the construction of a completely new 120-bed general hospital for Oconee County to be located in Seneca near the present Oconee Memorial Hospital. Upon completion of the project, the present Oconee Memorial Hospital will be converted into a 40-bed chronic disease unit.

Initial project construction applications have also been approved for an Auxiliary Health Center for



*The James F. Byrnes Clinical Center, State Hospital, Columbia, S. C. A 208-bed intensive treatment building containing an out-patient department constructed under P. L. 482 and P. L. 725 (Hill-Burton Program) and completed in 1959 at an estimated total cost of \$2,581,801.92.*

Architect: Lafaye, Fair, Lafaye & Associates, Columbia, S. C.

General Contractor: Congaree Construction Co., Columbia, S. C.

Photo by: E. S. Powell, S. C. State Board of Health.



*Ridgewood Tuberculosis Hospital, Columbia, S. C. A 52-bed hospital, for patients suffering from Tuberculosis, constructed under the Hill-Burton Program and completed in 1957 at a total cost of \$325,000.*

Architect: Lafaye, Fair, Lafaye & Associates, Columbia, S. C.

General Contractor: Charles J. Craig Construction Co., Columbia, S. C.

Photo by: E. S. Powell, S. C. State Board of Health.

Jasper County to be located at Hardeeville and for an addition to the Divine Saviour Hospital at York. The addition to the Divine Saviour Hospital will provide an additional six general beds as well as new x-ray and operating room suites and will provide for expansion of delivery room, recovery room, kitchen and other facilities.

Bids have recently been opened for the addition to

the Anderson County Memorial Hospital at Anderson and Greenville General Diagnostic and Treatment Center in Greenville. It is anticipated that the contracts will be let in the near future.

Final construction inspections have been made at the Greenville County Nursing Home in Greenville, the Byerly Hospital in Hartsville, and Columbia Hospital Diagnostic and Treatment Center in Columbia.



## BLUE CROSS . . . BLUE SHIELD

J. Decherd Guess, M. D.



Below there is a letter which was recently sent to a doctor. It is similar to many letters which we write. The doctor had admitted a patient who had rather vague gastro-intestinal symptoms, clinically diagnosed as due to spastic colon. The patient was in hospital two days. The x-ray studies confirmed the clinical diagnosis and added nothing new.

Blue Cross allowed diagnostic benefits. These are actually only token benefits and probably should be removed from the contract.

The patient was surprised, disturbed, and angered by our refusal to pay all charges. The doctor was also angered and as he said, "Advised him to exhaust all means to obtain proper benefits under his contract"—as he and his patient interpreted those benefits. ---

"Dear Doctor:

"Thank you for your letter to our Mr. Masters in regard to our denial of full Blue Cross benefits to Mr. ----- in connection with his hospitalization. It gives me an opportunity to explain our position, which seems so plain to us, but which so many doctors find hard to understand. I think the basis of the difficulty arises from the fact that in most of our communities the x-ray laboratory is situated in the hospital and the patient is billed for the x-ray studies by the hospital—this in spite of the fact that x-ray examination and diagnosis are professional medical services performed by doctors. They are not hospital services. Had Mr. ----- been sent to an x-ray laboratory not connected with a hospital either physically or professionally, there would not have arisen a question as to coverage of the services under a Blue Cross contract.

"Our ruling, namely, that only diagnostic benefits be allowed is in no sense a denial of the indications for the studies which you ordered, nor was it a criticism of you for having admitted the patient to the hospital in order to have them done.

"The Blue Cross subscription agreement provides coverage for necessary hospital services. True it provides x-ray services as a part of necessary hospital

services when such x-ray services are related to a condition which makes hospital services necessary.

"It is our contention in this case that Mr. ----- needed x-ray diagnostic studies not only to help determine what was the cause of his symptoms but also to rule out other abnormal conditions of his colon. But, there was no indication for hospital treatment. His illness was not such as to require hospital care. He was sent to the hospital primarily to have x-ray studies done. Those studies could have been done as an outpatient without his admission to hospital. He was admitted to hospital probably because it was more convenient to him, or to the radiologist, or to you. It may have been done with the idea that if he was admitted, his x-ray charges would be paid by the insurance carrier.

"We are happy that Mr. -----, during the seven years that he has been a member of Blue Cross, has not required hospital care. He is, perhaps, more fortunate in that regard than he has been if he has carried fire insurance on his home and has not had a fire.

"You state that he intends to drop Blue Cross-Blue Shield if we do not change our attitude in regard to this claim. I hope that you will use your good influence to prevent such an unwise move. He is seven years older than he was. He has fulfilled all waiting period requirements. His health is more uncertain now than it was earlier. Already, he is experiencing unpleasant symptoms suggesting impairment. He can never again purchase equivalent sickness insurance coverage for the same price that he is paying, and it is highly unlikely that he can secure equivalent benefits at any price.

"We have not penalized Mr. ----- because you did not find a serious disease. Both he and Blue Cross were fortunate that you did not, and Blue Cross will ever stand ready to come to his assistance when there is need for benefits provided by its contract.

"Sincerely yours,

J. Decherd Guess, M. D.

Medical Director"



"I'll have to hang up now, dear. Our summer-vacation in the mountains just walked in!"

## ANNOUNCEMENTS

### SOME COMING MEETINGS

The combined North and South Carolina E.E.N.T. Society will meet in Charleston September 13-17.

The South Carolina Pediatrics Society will meet in Columbia September 14 (evening) and September 15, when the general meeting will be held.

The Southeastern Regional Meeting of The American College of Physicians will be held in Columbia October 30-31.

The Founders Day Seminar at the Medical College of South Carolina will be held in Charleston November 4-6. The Founders Day Banquet which was at one time a feature of this meeting will be restored.

### TENNESSEE VALLEY MEDICAL ASSEMBLY READ HOUSE

Chattanooga, Tennessee  
September 28 - September 29, 1959

Heavy demand for hotel accommodations makes it imperative that physicians who plan to attend the Assembly write without delay for reservations to: Chattanooga Convention & Visitors Bureau, 819 Broad St., Chattanooga, Tennessee.

The 45th annual Clinical Congress of the American College of Surgeons will be held in Atlantic City, New Jersey, September 28 through October 2, 1959.

## SUGGESTED PROGRAM 11TH ANNUAL SCIENTIFIC ASSEMBLY SOUTH CAROLINA ACADEMY OF GENERAL PRACTICE

OCTOBER 1st and 2nd, 1959

THURSDAY, OCTOBER 1, 1959

8:00 a. m. Registration

9:00 a. m. Welcome

9:30 a. m. THE PRACTICE OF OFFICE GYNECOLOGY:

Dr. Luther Talbert, University of North Carolina  
10:30 a. m. COMMON AND UNCOMMON SYMPTOMS OF ANGINA PECTORIS:

Dr. R. Bruce Logue, Emory University  
11:30 a. m. LOW BACK PAIN AS A PROBLEM IN GENERAL PRACTICE BEFORE AND AFTER CONSULTATION:

Dr. Lenox D. Baker, Duke University  
12:30 p. m. Question and answer period for morning speakers:

Dr. Talbert, Logue and Baker

1:00 p. m. Luncheon with Wives

AMERICAN vs. ENGLISH SYSTEM OF MEDICAL PRACTICE:

Dr. John B. Reckless

2:30 p. m. THE PREVENTION AND TREATMENT OF TOXEMIA OF PREGNANCY:

Dr. Luther Talbert

3:30 p. m. FRACTURES AND RECOMMENDATIONS FOR THEIR OFFICE CARE:

Dr. Lenox D. Baker

4:30 p. m. NEW DRUGS IN HYPERTENSION:

Dr. Bruce Logue

5:30 p. m. Question and answer period for afternoon speakers:

Drs. Talbert, Baker and Logue

7:00 p. m. Cocktails

8:00 p. m. BANQUET

Dr. Fount Richardson, President, A. A. G. P.

FRIDAY, OCTOBER 2, 1959

8:00 a. m. Registration

9:00 a. m. ILLUSTRATIVE CASES — GIVING EARLY SIGNS, SYMPTOMS AND TREATMENT OF HANDICAPPED CHILDREN AND WHAT SOUTH CAROLINA HAS TO OFFER IN CARE OF THESE CHILDREN:

Dr. Gilbert F. Young, Medical College of South Carolina

10:00 a. m. OFFICE PSYCHIATRY IN GENERAL PRACTICE:

Dr. Sam R. Kilgore, Spartanburg, S. C.

11:00 a. m. THE OFFICE NEUROLOGICAL EXAMINATION (demonstration):

Dr. Rhett Talbert, Medical College of South Carolina

12:00 p. m. Luncheon with Wives

BEHAVIOR PROBLEMS IN CHILDREN, ESPECIALLY ADOLESCENCE:

Dr. Sam R. Kilgore



1:30 p. m. NEURITIS—AN OFFICE PROBLEM  
AND ITS TREATMENT:

Dr. Rhett Talbert

2:15 p. m. IS THE FUTURE OF PREPAYMENT  
PAST?

Mr. Wm. A. Sandow, Blue Cross-Blue Shield

3:00 p. m. Question and Answer Period:

Drs. Young, Kilgore, and Talbert

Dr. John Cuttino—Moderator

3:30 p. m. Short Business Meeting while your wife  
packs.

Drawing of Door Prizes—You'll have time to get  
home.

---

Announcing

The Twenty-Fourth

**PIEDMONT POST GRADUATE  
CLINICAL ASSEMBLY**

Wednesday, September 16th,

Thursday, September 17th

**CLEMSON HOUSE**

Clemson, South Carolina

You are invited to attend and hear the following  
outstanding men in the profession.

**DR. CLAUDE STARR-WRIGHT**

Medical College of Georgia

**DR. WILLIAM C. THOMAS**

Medical College of Florida

**DR. D. M. BERGENSTAL**

National Institute of Health

**DR. E. G. HERNDON**

Emory University School of Medicine

**DR. HARRIS D. RILEY**

The University of Oklahoma Medical School

**DR. ELMER TUTTLE**

Emory University School of Medicine

**DR. C. Z. BOWERS**

Louisiana State University, New Orleans

**DR. GEORGE V. IRONS, JR.**

Donaldson Air Force Base Hospital

**DR. ROBERT P. GRANT**

National Institute of Health

**WILLIAM SCHULZE, M. D.**

*Chairman, Program Committee*

---

## DEATH

---

**DR. J. E. SCOTT**

Dr. James Edward Scott of 11 Logan St. died June  
29 at his residence in Charleston.

Dr. Scott, a son of Capt. Robert F. Scott and Anna  
Van Tyne Scott, was born in Charleston. He was a  
graduate of the Medical College of South Carolina and  
also studied at Harvard University. He was a member  
of the Roman Catholic Cathedral of John the Baptist  
and its Holy Name Society.

He was physician for the city's public schools for  
many years. Dr. Scott was also a clinician for the  
Charleston County Health Department, and main-  
tained a private practice.

He was a member of the South Carolina Medical  
Association, the Charleston County Medical Associa-  
tion and the American Medical Association.

---

## BOOK REVIEWS

---

*SQUINT AND ALLIED CONDITIONS*, by George  
P. Guibor. Grune and Stratton, New York. 1959.  
Price \$11.50.

The author presents his moderate views in a way  
that will be pleasing to all readers. However, he does  
not hesitate to be emphatic when convinced. He fully  
realizes that all is not known on the subject of squint.  
There are many controversial issues which he ap-  
proaches, but he does this in a manner that is least  
antagonistic to readers of diverse views. His case re-  
ports are interesting and discussions brief and to the  
point, though one is too often left with a patient  
moderately improved and not cured. His discussions  
of the use of atropine and prisms will bring fresh  
viewpoints to many practitioners who will be exceed-  
ingly interested to say the least. He displays more  
patience than most of us will be willing to endure,  
but his results seem to prove the worth of his tedious  
and thought-provoking methods. This book is an ex-  
ceedingly well written, interesting, and valuable con-  
tribution and should be in the library of every student  
and practitioner of ophthalmology.

J. W. Jervcy, Jr., M. D.

---

*A DOCTOR REMEMBERS* by Edward H. Richard-  
son, M. D.; Vantage Press, New York, 1959. Price  
\$3.95.

These are the recollections of Dr. Richardson, who  
was for many years a member of the Johns Hopkins  
faculty and who recalls vividly the famous men of  
that Institution—Welch, Osler, Halsted, and Kelly—  
as well as many other medical figures with whom he  
was associated during his career.

The story includes boyhood in Virginia, military  
school and college and many anecdotes of the many  
classes and varieties of people whom he has known  
during his lifetime. Dr. Richardson recounts his long  
and rich surgical experience and has many stories to  
tell outside the strict confines of his medical work.

The story moves slowly but surely, without any  
great flashes of excitement. It should be of interest to  
many medical men.

J. I. W.

# ONE HUNDRED AND ELEVENTH ANNUAL SESSION SOUTH CAROLINA MEDICAL ASSOCIATION HOUSE OF DELEGATES

MAY 12, 13, 14, 1959 — COLUMBIA HOTEL — COLUMBIA, SOUTH CAROLINA

DR. R. L. CRAWFORD, Presiding

The Annual Convention of the South Carolina Medical Association was held at the Columbia Hotel, Columbia, South Carolina, May 12, 13, 14, 1959. The President, Dr. R. L. Crawford, presided. The first meeting was called to order at two-thirty o'clock P. M., on May 12th, by the President.

ORDER OF BUSINESS—Tuesday, May 12, 1959—2:30 P. M.

THE CHAIR: Gentlemen, the House of Delegates of the One Hundred and Eleventh Annual Session of the South Carolina Medical Association will please come to order, and Rev. James F. Burris, Pastor of the First Baptist Church, West Columbia, South Carolina will give us the invocation.

(Invocation) O, thou eternal God, our loving heavenly father, in whom we move and have our being, unto whom we must look for all of the spiritual blessings that we enjoy, Thou, who art the giver of all good things, Thou with whom we must cooperate in every worthy endeavor, we are grateful that we can assemble here today and for the coming days of this convention; we pray thy blessing upon the House of Delegates, here assembled this afternoon, upon the presiding officer, and all of the other officers of the convention; may thy guidance be upon all of these of the medical profession as they plan for their work during these days, as they discuss their problems, their procedures and as they have social seasons together may thy guiding hand be upon them and may they ever be kept in thy care. Bless them in the ministry in which they engage, as they go about to heal humanity's hurt. Crown their efforts with that degree of success thou wouldst have them achieve. And especially would we invoke thy blessing upon this assembly today and the sessions of the convention that shall follow, through Jesus Christ, Our Lord and in whose name we ask it. Amen.

THE CHAIR: Thank you so much Rev. Burris.

Gentlemen, to help us get through on time, during the House of Delegates meeting, I want to suggest that in any discussions of any motion or report the speaker try to limit his remarks to not over five minutes.

The first report will be that of the Credentials Committee, Dr. O. B. Mayer, Chairman, Columbia.

DR. MAYER: (Recognized) Mr. President, there are about 50 delegates now in attendance. Twenty-five constitute a quorum.

THE CHAIR: A quorum is present and we can deliberate.

I would now like to take this opportunity to introduce to you your new president-elect, whom I have known since my early college days, 1916 to be exact, when I came to Carolina. Dr. Weston was a member of the freshman class and so was I, and to this day we have remained good friends even though he went to a different medical school, the University of Virginia. Dr. Weston. (Applause)

DR. WILLIAM WESTON, JR.: Fellow delegates, it is a pleasure to have you in Columbia. We have made some effort in getting you here and I hope you will enjoy your stay while in Columbia. If you are not having a good time I will be glad to converse with you and have a discourse on the subject and I will be glad to see that you have a good time. Now, I

am not promising everything, just a few things, but we will see that you get wet in some way, either externally or internally, if you are not having a good time. I am delighted to be here on this occasion to extend to you, not the key of the City of Columbia, but the medical key to the City of Columbia, and if there is any hospital, here in Columbia or vicinity that you would like to visit I will be glad to have this put at your disposal, including the State Hospital, Dr. Hall will be delighted to have you out there, and if you lack work he will be glad to put you to work. So, if there is anything that we can do for you, do not hesitate to call on any one of the members of the delegation from the Columbia Medical Society of Richland County or any member of the Columbia Medical Society and we will meet you one hundred percent wholeheartedly, thank you, I am delighted to be here with you. (Applause)

THE CHAIR: Thank you, Dr. Weston.

On the bulletin board you will notice meeting rooms and places for the various Reference Committees. The lists of the Reference Committees are printed in your program on Page 12. There will be a few corrections in this due to the fact that some members were not able to serve.

(Corrected List of Reference Committees)

1. Reports of Council and Officers.  
L. D. Lide, Chairman, Florence  
J. Inabinet, Cheraw  
Roderick Macdonald, Rock Hill  
Samuel B. Myrle, Walhalla  
Bachman S. Smith, Jr., Charleston
2. Legislation and Public Policy.  
James H. Gressette, Chairman, Orangeburg  
Harold S. Pettit, Charleston  
Waddy G. Baroody, Jr., Florence  
Sam H. Fisher, Greenville
3. Public and Industrial Health.  
F. C. Owens, Chairman, Columbia  
Clay W. Evatt, Charleston  
Barney F. Timmons, Hartsville  
John A. Seigling, Charleston  
Henry F. Hall, Columbia
4. Amendments to the Constitution and By-Laws.  
Henry C. Robertson, Jr., Chairman, Charleston  
John D. Thomas, Jr., Loris  
Charles R. May, Jr., Bennettsville  
Kirby D. Shealy, Columbia  
Henry F. Ross, Greenville
5. Credentials Committee.  
O. B. Mayer, Chairman, Columbia  
Chapman J. Milling, Columbia  
J. Gavin Appleby, St. George  
John W. Blanton, Jr., Chesnee  
Robert P. Jeanes, Easley
6. Insurance, Blue Cross, Blue Shield.  
William H. Prioleau, Chairman, Charleston  
George D. Johnson, Spartanburg  
Richard W. Hanckel, Charleston  
Martin Teague, Laurens  
Joseph I. Converse, Greenville
7. Miscellaneous Business.  
J. C. McAlpine, Chairman, Bennettsville  
W. Victor Branford, Dillon  
Lebby B. King, Lake City  
James E. Lipsecomb, Jr., Greenville



- Edward F. Parker, Charleston  
 8. Tellers and Sergeant-at-Arms.  
 William Weston, Jr., Chairman, Columbia  
 Frederick P. Shepherd, Aiken  
 R. L. Lumpkin, Georgetown  
 R. Lee Sanders, Columbia  
 T. Marion Davis, Manning

THE CHAIR: Are there any resolutions or recommendations to be presented at this time?

DR. W. A. SMITH (Recognized by The Chair)

Mr. President and Members of the House of Delegates I would like to present a problem which I believe deserves serious consideration by Members of our Association. It concerns the establishment of a "Benevolence Fund" for the purpose of aiding in a pecuniary way, indigent physicians and their families of our State. As far as I am aware this State organization has never been alerted to the situation and has therefore never taken any action. It is my belief that some steps should be taken now to alleviate the distress of those in need at this time and to prepare for others in the future who might be overtaken by ill health or other adversity and will need a helping hand.

There are several of our sister states that have well organized systems of caring for their indigent colleagues, among these are California, New York, Pennsylvania, Illinois, Massachusetts, New Jersey and there are many others who have plans underway for this purpose. All of them who have studied the situation have found indigency in a greater degree than the profession and the public suspected.

In order to inaugurate a program for the purpose of giving succor and a means of relief to our unfortunate colleagues a definite organizational plan should be adopted, I submit that such a plan should embody the following:

- 1) The Benevolence Fund should be established by voluntary contributions of members—I mean voluntary—not assessment.
- 2) That a Benevolence Committee—a small one of three or five members be elected by Council to which shall be delegated full powers to raise additional funds, to investigate the needs of beneficiaries and to disburse the funds in such manner as seems equitable and needful.
- 3) The Treasurer shall keep the Aid funds entirely separate from all other moneys of the Association.
- 4) Details of administration shall be worked out by the Committee and submitted for the approval of Council.
- 5) The names of the beneficiaries shall be known only to the Committee and to such officers of the Society concerned with the management of the fund.

In order, Mr. President to bring the matter up for action I move — that a Benevolence Fund be established to give financial aid to indigent physicians and their families who are or have been members of the South Carolina Medical Association, and

That Council be directed to elect a suitable committee to be known as the "Committee on Benevolence", which committee shall be empowered to administer the fund under such rules and regulations as may be approved by Council.

That Council be given full power to proceed and that it be requested to act as expeditiously as possible.

(Dr. Smith told of some of the early organizations formed for aid of indigent physicians, he stated "one of the early organizations was in Massachusetts, the "Medical Benevolence Fund of Massachusetts" which was started in Boston. Then in Los Angeles, there is a very large "Physicians Aid" organization, gotten up by the Los Angeles County Medical Society, and they

are particularly well-fixed, they have \$800,000.00 and they do an enormous amount of helpful work to indigent physicians. They have a home for indigent physicians, and they pay them monthly income anywhere from \$100 to \$250 a month depending upon their needs. Then in our own State, Spartanburg, S. C., there had been established a physicians' aid organization, I don't know just what its name is; and in Charleston we have probably the oldest physicians' aid organization in the United States, it was started in 1849 and it has done something over the years of great value to the indigent physicians in that community, the society is called the "Society for the relief of the families of deceased and disabled indigent members of the Medical Profession of the State of South Carolina" it is commonly called the "Widows and Orphans Society" and although gifts have been helpful to those in need they have been far below the real need of the individuals. They have been more or less token gifts, because it was a very, very poor society.")

THE CHAIR: Thank you, Dr. Smith. Your motion and recommendation will be referred to the Reference Committee on Miscellaneous Business.

Are there any other recommendations or resolutions? DR. L. D. LIDE, Florence (Recognized by The Chair):

Dr. Crawford and Members of the House of Delegates, This was a resolution which was adopted at the meeting of the Pee Dee Medical Association on April 16, 1959. Actually at this time the meeting was convened as a meeting of the Sixth District. It was introduced by Dr. Walter R. Mead. (Reading)

"WHEREAS the problem of alcoholism is one of growing importance in this state in which there are already an estimated 35,000 victims, and

WHEREAS the medical profession now regards this condition as a disease in which physicians must assume important roles in treatment, and

WHEREAS physicians must often depend on other agencies such as AA, Mental Health Clinics, the Clergy, etc., for assistance in treatment, and

WHEREAS no authoritative body can now speak for the medical profession in the numerous community problems which involve the alcoholic.

THEREFORE, BE IT RESOLVED that this district Medical Association consisting of the constituent Medical Societies of the Counties of Chesterfield, Darlington, Dillon, Florence, Horry, Marion and Marlboro petition the House of Delegates of the South Carolina Medical Association to authorize the appointment of a Committee on Alcoholism whose function shall be to concern itself with the problems of alcoholism as they affect the medical profession and hospitals of this state, and to serve as a liaison group between the medical profession and these agencies and individuals who are concerned with the treatment of the alcoholic and with the education of the public in matters pertaining to alcoholism."

THE CHAIR: Thank you, Dr. Lide, this resolution will be referred to the Reference Committee on Legislation and Public Policy.

Are there any other resolutions or recommendations? DR. JAMES DUNCAN, Spartanburg (Recognized by The Chair)

Mr. President, and Members of the House of Delegates, this resolution was adopted by The Spartanburg County Medical Society. A number of you may have already seen this resolution for I think it was mailed to most of the county societies in the state to see what their reaction was before they came to this meeting, and I will read it as we adopted it in our society. (Reading)

WHEREAS the American Medical Association has declared, in its *Guide for Conduct of Physicians in Relationships with Institutions*—adopted 1951, and



periodically reaffirmed, that "a physician should not dispose of his professional attainments or services to any hospital, corporation or lay body by whatever name called or however organized under terms or conditions which permit the sale of the services of that physician by such agency for a fee" and its *Principles of Medical Ethics*, as adopted in June, 1957, states in Section 6 that "a physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care"; and

WHEREAS it is a matter of concern that violations of these principles occur; and

WHEREAS the practice of medicine by corporations, profit or non-profit, irrespective of the specialty concerned, is undesirable; therefore be it

RESOLVED, that the policy of the Spartanburg County Medical Society shall be that no physician shall enter into a relation with any hospital, corporation or lay body by whatever name called or however organized that enables it to offer his professional services for a fee; and be it further

RESOLVED, that the professional services shall and hospital services shall *not* include the practice of pathology, radiology, anesthesiology and any other specialty that has been defined by the American Medical Association as the practice of medicine; and be it further

RESOLVED, that these resolutions do not refer to physicians who are employees of a corporation or other lay agency that does not sell the professional services of the physician, nor to the physician who wholly or in part devotes himself to teaching, administration, research, charity, governmental service or the like and is remunerated by a corporation or other institutions for these services only, and be it further

RESOLVED, that no stigma shall be attached to any practitioner of medicine because of his financial arrangements existing at the time of adoption of this policy, provided a sincere effort is being made by the practitioner of medicine to comply with this statement of policy."

THE CHAIR: Thank you, Dr. Duncan. I will refer that resolution to the Reference Committee on Legislation and Public Policy.

Are there any other resolutions?

DR. B. OWEN RAVENEL, Charleston, (Recognized by the Chair)

This resolution was passed by the Charleston County Medical Society for presentation to the House of Delegates. (Reading)

"WHEREAS, within the past few years, there has been a noticeable increase in the number of lawsuits against physicians in South Carolina based upon alleged professional negligence and malpractice and there appears to be a definite tendency towards the further increase and multiplicity of such suits; and WHEREAS, such tendency follows a trend already much further advanced in other sections of the country; and

WHEREAS, in many instances such suits which reached the stage of trial in Court have been dismissed by the Presiding Judge through non-suits and the direction of verdict for the physicians, thus holding that the claim was without foundation in fact;

NOW THEREFORE

BE IT RESOLVED by the House of Delegates of the South Carolina Medical Association, that District Committees on professional liability be set up in each of the nine Medical Association Districts in the State for the purpose of considering the facts surrounding any claims on account of alleged professional negligence or malpractice against any physician

in the District, to determine in the Committee's best judgment, whether or not there is any factual basis for such claim and make recommendation to the physician involved whether or not such claim should be vigorously contested or settlement thereof attempted; that each Councilor arrange for a meeting of the physicians in his District as early as possible, for the purpose of creating such committee and to determine the number of members thereof and their tenure of office; and that all members of the Association be urged to make use of such committees and to seriously consider and follow, so far as possible, their recommendations; and

BE IT FURTHER RESOLVED that the County Bar Associations be apprised of the appointment and purpose of such committees and invited to encourage their members to cooperate with them to the fullest possible extent."

THE CHAIR: Thank you Dr. Ravenel. This resolution will be referred to the Reference Committee on Miscellaneous Business.

Are there any other resolutions?

If there are no other resolutions, while we are waiting on the ladies from the Auxiliary we will start with the reports of the various officers. I will ask Dr. Henry Robertson to come forward and take the Chair. DR. HENRY ROBERTSON, JR. (TAKES THE CHAIR)

This report we will hear will be the report of the President, Dr. Crawford.

DR. R. L. CRAWFORD: (Reading report) "Mr. Vice-President and members of the House of Delegates:

As your president, I wish to submit a brief resume of my activities during the past year. Legislative-wise, on the State level, our course was relatively tranquil. Most of the activity was taken care of by Mr. Meadors and our Legislation and Public Policy Committee under the able chairmanship of Dr. Frank Owens.

The very important committee on Care of the Aging

Dr. Cathcart Smith as chairman, has been very active and outlined a course of action for the Association in this field. A joint committee on aging, including members from this association, the Hospital Association, the Nursing Home Association, and the Dental Association, has been organized. Its first meeting was held on May 6th, 1959 in Columbia. Blue Cross and Blue Shield are formulating plans for coverage of our senior citizens who wish to avail themselves of this service.

The Medical Civil Defense Committee, under the competent leadership of Dr. Charles N. Wyatt, is rapidly completing plans of action for any catastrophic emergency that may occur in South Carolina, and, if necessary, in our neighboring states. A meeting of this committee will be held in Columbia on May 27th.

During the year your president represented the association at several county society and district meetings, the Executive Board of the Woman's Auxiliary, Opening Day exercises at the Medical College, the Greenville General Hospital Alumni Association meeting, and addressed several of these. Also attended the South Carolina Cancer Society meeting, the State National Foundation meeting, the Governor's Conference on Nutrition, the National Blue Shield Professional Relations Conference in Chicago, quarterly meetings of the Board of Directors of Blue Shield, all meetings of Council, and presided at the meeting of County Society Officers here in Columbia. Due to conflicts I am sorry that it was impossible for me to attend several others.

I think a few comments would be in order on the attendance at the County Officers' meeting, as well as National and Regional Medical meetings. At the

County Officers' Meeting we had only about forty (40) physicians out of a possible 80 to 90. The purpose of this meeting is to disseminate information to the constituent county societies, through their officers, on current problems involving the State Association. Next to the annual meeting this is the most important one we have, and it deserves 100% attendance. During the coming year much of the positive action on the problems of aging will have to begin at the local county level. I hope that county society officers and doctors in general will cooperate and help solve this problem.

Attendance at national and regional medical meetings is very poor from South Carolina, and this puts our State at a distinct disadvantage in obtaining any action we may desire on a national level. For years I have attended many national and regional meetings, including the scientific programs. Looking back over the years I feel that by attending these meetings I have been the recipient of many pearls in diagnosis and treatment from which my patients have definitely benefited. In my opinion it would be very helpful if every doctor in South Carolina would attend at least one of these meetings a year.

During the past three months a new trial program aimed at improving our public relations has been in operation. I certainly hope this will be continued on a yearly basis. Much good can come to the Association from this.

I would like to take this opportunity to commend the officers, members of the House of Delegates, the Council, and the various committees for their enthusiastic work in the affairs of the Association and express my sincere appreciation for their help this year. I thank you." (Applause)

DR. ROBERTSON: That report will be referred to the Reference Committee on Reports of Council and Officers. I will now turn the Chair back to the President.

DR. CRAWFORD (Resuming The Chair) At this time we have the pleasure of hearing from the president and president-elect of the Ladies Auxiliary and I will ask that Dr. Cain and Dr. Wilson escort them to the platform at this time. (Applause)

THE CHAIR: Gentlemen, at this time we will hear from Mrs. George Orvin, President of the Woman's Auxiliary.

MRS. GEORGE ORVIN: Thank you, Dr. Crawford and members of the House of Delegates. As always it is a wonderful pleasure to be here with you. I bring you greetings from the Woman's Auxiliary and in a very brief capsule report I would like to give you a little idea of some of the things we have done this year. The Woman's Auxiliary contributed \$1,467.21 to the A.M.E.F., and \$105.21 of this was collected in our State A.M.E.F. traveling pig. We reached 76% of our *Today's Health* quota with 622 subscription credits. Recruitment has always been a major part of our program. This year another successful rally was held in Rock Hill, S. C., and we had 276 people present at that rally. We are happy to report an increase in membership. This year we have 826 paid members. This is just a brief idea of some of our accomplishments. I want to thank you for your advice, your counsel and your financial aid during the year. When I got down to this financial aid part I realized whether it be in the home or in the organization it is papa who pays. It rather reminds me of the little girl on Art Linkletter's program, "What do you want to do when you grow up?" She said, "Well, I am not sure, but I think I would like to get married." And he said, "Really, why?" She said, "Well, I would rather do that than work." (Laughter) I think that is the way we have to look at it, we are always turning to you for support.

At this time I would like to present to you the in-



coming president of the Woman's Auxiliary, Mrs. John G. Ramsbottom, of Spartanburg, S. C. (Applause)

MRS. JOHN G. RAMSBOTTOM: I consider it a privilege to take leadership of this powerful organization, and please, each one of you feel free to call on me at any time. We will do anything that you want us to do and please know that any cooperation that we can give you, we are standing by. Thank you. (Applause)

THE CHAIR: Thank you Mrs. Orvin and Mrs. Ramsbottom, and I am sure they deserve a big hand, Mrs. Orvin particularly for the energetic work that she has done in the affairs of her office and I would like to give her a rising vote of thanks at this time. (Convention rises and applauds)

MRS. ORVIN: Thank you very much. (The ladies are escorted from the platform by Dr. Cain and Dr. Wilson.)

THE CHAIR: We will now have the report of the Executive Secretary, Mr. Meadors.

MR. MEADORS: Dr. Crawford, Members of the House of Delegates, the activities of your Association have continued to expand, its membership to increase and its affairs generally to flourish during the past year. In an effort to abbreviate this report as much as possible and at the same time leave it sufficiently comprehensive, we have divided the activities of the



Mrs. John Ramsbottom, new President of the Woman's Auxiliary speaks to the Association.



Executive Office into four sections, each of which will be briefly discussed.

#### ADMINISTRATIVE

Upon the increase of annual dues last year, the earmarking of \$5.00 from each member for a Permanent Home Fund and your direction that we bill for an additional \$10.00 per member, contribution to support A.M.E.F., statements were mailed to all members for the first time immediately after January 1, 1958. This resulted in a more rapid collection and the same procedure was followed in 1959 and with the same results. Some minor confusion resulted in some of the larger County Societies, which mailed their own bills, but this we believe will be adjusted in 1960.

With the increase in membership dues the financial situation of the Association improved materially, as is shown in detail by the report of the Treasurer. As usual, all of the administrative and clerical work in connection with the handling of these funds, both collection and disbursement, are carried on through the Executive Office.

Activity of the Committees of the Association and interest in committee work has increased substantially within the past few years and we are having an increasing role in assisting these committees.

A part of our duties consists also in maintaining some liaison with the various County Societies. We undertake to maintain a list of County officers and experience considerable difficulty in keeping these up to date near the turn of the calendar year when Societies reorganize. Numerous calls for information concerning the county officers and organizations are received and answered through our office.

Also, an important phase of our administrative work is maintaining liaison with the American Medical Association, its various Councils and committees, and attending its annual and interim meetings and various affiliated conferences, which are held from time to time.

The handling of the records in connection with the American Educational Foundation and the rather considerable correspondence carried on by the Chairman of its Committee, Dr. Stokes, during the past year was all handled by my assistant. This, in itself, represented a substantial increase in the amount of clerical work and financial record keeping over that which had been handled in previous years. So much for our routine activity.

After much greater delay than we wished or had anticipated, the Directory of Members of the Association was finally issued in February of this year. Although plagued from the beginning by a series of unfortunate circumstances, this Directory is the most complete and up to date we have issued so far, but we regret that it does contain several typographical errors, despite a very careful checking and rechecking of the copy and the printer's proofs. We feel sure, however, that its completion is welcomed by the members and trust that it serves your needs along this line.

#### LEGISLATIVE

Among the liaison activities with A. M. A., referred to above, is the continued contact maintained with the national legislative committee. The member of that committee from this region is Dr. Chrisman of Coral Gables, Florida. Several times during the past year, we were called upon by him to pass on to our Congressional delegation requests for action, in line with A. M. A. policy. In connection with the Keogh-Jenkins Bill which passed the House recently, we were successful in obtaining positive replies from five of the six Congressmen in South Carolina and one of them, Mr. Hemphill of Chester, actively supported the bill in debate on the floor.

Just after the opening of Congress in January of this

year, we addressed friendly letters to the two Senators and the six Congressmen requesting advice, information and suggestions concerning legislation of interest to the profession. In most instances these brought friendly, interested and sometimes cordial response.

Most of our legislative activities, of course, are devoted to South Carolina. There have been no serious threats in connection with statewide legislation during the session just closed, but it was necessary to keep constantly on the alert and several bills were stopped before they had a real opportunity to get started.

The Optometrists introduced no proposed changes in the law this year. Representative Mitchell of Oconee County, the naturopath who formerly operated a naturopathy hospital in Seneca, introduced one bill, which was never reported out of the Committee to which it was referred, and made strenuous effort to gain support for another proposed measure.

An effort made by him in December to persuade the officials of the state Medical Association to withdraw opposition to a bill which would have relicensed on a limited number, resulted in the appointment of a committee by your President, Dr. Crawford, which met in Columbia and heard Mr. Mitchell's presentation. Since his plan indicated no improvement in the professional and scientific qualifications of the people concerned, he was notified, for the Committee, that our position was unchanged.

Upon learning about a month ago that Mr. Mitchell was undertaking to have his measure made a Committee Bill and that he seemed to be gaining some support, we went to work immediately on the telephone and were successful in stopping the move promptly. The Bill was not introduced, either as a Committee bill or by Mr. Mitchell individually.

In connection with the naturopathy problem, we have continued through the year efforts to secure better enforcement, but with not much success. Several letters were addressed to the head of the South Carolina Law Enforcement Division and at our request, an investigator was assigned to the matter in Charleston. Despite specific requests we have never received a definite report from SLED on the results of the investigation. We were advised orally, however, that the matter there is badly complicated, as has been known to us for some time, by the association of one of the most active naturopaths with a licensed doctor of medicine. We are confident that the existence and continuance of this situation is responsible to some extent for the apparent apathy or, at least, lack of activity, on the part of SLED to attempt to enforce the law in the Charleston area. Other specific instances of naturopaths still attempting to practice in other parts of the State were likewise reported and some investigation made but no action taken.

We believe that the most effective work that should properly be expected of the State Medical Association has been done, in securing passage of the law and in cooperation with the Solicitor in at least one prosecution in which the law was upheld and the maximum penalty enforced. Enforcement is a local problem and can be carried out best through local influence. In any case, we are satisfied that the few remaining naturopaths will gradually fade out of existence, and that no new ones will be permitted to come in.

A bill introduced by the chiroprodists contained certain new provisions which would tend to improve their status and which were not objectionable. The bill, however, omitted several provisions of the present law limiting the extent of their practice, and for this reason it was opposed and held in committee until next year.

Before passing from this phase of our report we wish



to comment on the excellent relationship existing between the medical profession in South Carolina and the General Assembly. It has been evidenced repeatedly that the Legislators generally are keenly sensitive to the wishes of the profession. They have confidence in your judgment and believe generally in the good faith of your recommendations. We keep in touch daily with the developments in both houses during the Session but actually have not had to spend much time in Columbia. On the occasions when it was necessary to be there and contact the legislators, it has been highly gratifying to find a cordial reception and nearly always an immediately favorable response from members of several committees in both the House and the Senate. On more than one occasion a member has voluntarily called or written to us about some development in which he knew we would be interested.

We do not know of any state, large or small, in any part of the country, whose medical profession has a relationship with the members of the General Assembly superior to that enjoyed by you in South Carolina, or whose record over the years can be compared with yours. Since the Association became actively engaged in these matters fifteen years ago, the batting average is 100%. There is no statewide legislation actively pushed or opposed by the South Carolina Medical Association which you have not succeeded in having enacted or defeated. To be sure, on occasion it has taken time and the introduction of two or more bills, but eventually the result has been what we wanted. This, of course, must not make us overconfident. The situation could change. It depends upon a continuation of our sincerity of purpose, our good faith in dealing with the General Assembly, sound tactics, and in not becoming actively engaged in too many legislative issues.

#### LEGAL

Our duties as counsel for the Association, having increased materially in the past few years; we have had repeated requests for advice in connection with existing or proposed legislation, organization and activities of county societies, so far as their legal obligations are concerned, and numerous other matters. The emphasis placed by the American Medical Association's Legal Department within the past few years on improvement of liaison between the medical and legal professions, its emphasis upon the doctor's obligation with respect to testimony in court and the promotion of efforts toward better cooperation and understanding between the two professions is bearing fruit and is tending to emphasize the importance of the duties of our office along this line. This is a very healthy situation and we hope the understanding between the two professions can continue to increase.

#### PUBLIC RELATIONS

We have continued to cooperate so far as possible with the AMA in connection with several public relations projects. We strongly believe that public relations are best obtained as a result of positive, substantial acts in the interest of the public. Our interest and activities have always been devoted accordingly, rather than to the simple promotion of public relations as such. Most recently we have cooperated with the President, Dr. R. L. Crawford, in the development of a program to improve the health care of the aging in the State. A state Joint Council is in the process of being organized and statistics and information accumulated. Last month we addressed the evening session of the Annual Meeting of the State Nursing Home Association in Columbia. Again, in this field, we are confident that the public relations of the profession in South Carolina compare favorably with those in any other part of the country. This is reflected in the Courts, in the General Assembly, in the State Commissions, in the Administra-

tive agencies, in our contact with the public generally, in the activities of Blue Cross - Blue Shield, and in the happy situation which exists in the Association's relationship to various departments of the State Government.

#### CONCLUSION

Finally, so far as can be determined on the basis of the visible evidence, your Association is in excellent position financially, professionally, legally, legislatively, and so far as concerns its relations with the public.

We should like to express again our continued appreciation for the cooperation and support of all of the officials and members of Council in our efforts to discharge the duties of the office.

In particular, we wish to express our most genuine and sincere thanks to the Chairman of Council, Dr. Joe P. Cain, as he leaves the office so efficiently and capably administered by him over the past five years. During that time the work of our office has required a close association with Dr. Cain and for me the relationship has been a most pleasant one. We have had the opportunity to observe at close range the efficient leadership, tireless energy and broad comprehension of the problems of the Association which have always been his. It has been a most rewarding experience to have had the opportunity to work so closely with Dr. Cain."

Respectfully submitted,  
M. L. Meadors, Exec. Sec'y.

(Applause)

THE CHAIR: Thank you, Mr. Meadors, this report will be referred to the committee on Reports of Council and Officers.

The next report will be the Report of the Secretary, Dr. Robert Wilson.

DR. ROBERT WILSON: Mr. President, Members of the House of Delegates, the office of the Secretary of the South Carolina Medical Association is to some extent limited in scope, duties, and responsibilities, but it is an interesting one. Most of the details of membership, the secretarial details connected with the annual meeting, the House of Delegates, and membership on the Committees of the House, and much of the correspondence with the American Medical Association is carried out by the Executive Secretary, Mr. M. L. Meadors. To him I owe a debt of gratitude for a job well done, and his efficiency in this capacity takes a great load off the work of the Secretary.

As Secretary of the Council I have attended all meetings of this group and have carried out its directives. The success of the work of the Council is very largely due to the effort and work of its Chairman, Dr. J. P. Cain of Mullins, and to him the Association owes its sincere thanks.

One of the duties of the Secretary is to keep track of the various governmental commissions, to which nominations are made by either the Council or the House of Delegates, and the nominee is commissioned by the Governor. Examples of this are the State Board of Health, the State Board of Medical Examiners, the various medical advisory boards, and the Governor's office must be notified promptly of the nominations of the House of Delegates. The secretary has tried, perhaps not too successfully, to conduct a Placement Service for physicians desiring information regarding the possibilities of practice in various communities of the state, but he is completely dependent on the membership of the Association to apprise him of these opportunities and this has been somewhat difficult to obtain. However, in the long run each individual must make this decision for himself after a personal survey of the community in question.

Because the work of the Secretary of the Association is a continuous one, it is certainly wise not to

change this officer each year. However, an indefinite and extended tenure of office is likewise unwise. With the Executive Secretary carrying out much of the detailed work, it is my opinion that in general the Secretary of the Association should serve for perhaps a minimum of four years, and perhaps a maximum of eight years. I shall certainly expect to follow this principle myself.

As Secretary I have no particular suggestions to make to the House of Delegates this year but would like to express my thanks for the honor and privilege of having served in this capacity.

Respectfully submitted,  
Robert Wilson, M. D.  
(Applause)

THE CHAIR: Thank you, Dr. Wilson. That report will be referred to the Reference Committee on Reports of Council and Officers.

I am going to skip the next report and go to the Report of the Editor of *The Journal*, Dr. Waring.

DR. J. I. WARING: Mr. President and Members of the House of Delegates, *The Journal* has continued in production during the past year very much as it has gone along in the few previous years. There has been a pleasing increase in the amount of advertising and consequently in the size of *The Journal*. There has also been some likelihood of an increase in the cost of printing, which will possibly offset largely the increase in revenue, but so far this has not materialized and we are hoping that maybe if we don't look at this problem, it will just go away.

The same difficulties in regard to the bulk of the reading material still obtains. We are happy to have papers submitted, and we have managed to keep a few jumps ahead by the offerings which we have received, but we would much prefer to be in the position of other Journals about which we know who manage to have material set up for many months in advance, much to the comfort of the editor and much to the pleasure of the printer. The editor has endeavored to maintain a reasonably strict standard for the material published, and hopes to do so in the future.

We are still short on local news, and the number of our interested contributors can be counted in short order. The editor is still most desirous of comment, so that he will know whether he is doing what he is supposed to do, or whether he is teetering on the brink of oblivion. (Applause)

THE CHAIR: Thank you, Dr. Waring. This report will be referred to the Reference Committee on Reports of Council and Officers.

The next report will be that of Chairman of Council, Dr. Joe Cain.

DR. JOE P. CAIN: Mr. President, Members of the House of Delegates, this is the last time that I will give you a report as Chairman of Council, and I think a few comments concerning our Council, during the tenure of my office as Chairman, are most pertinent at this time. Now, I want you to know that you have got very good representation of men to represent you during the interim period between our meetings of the House of Delegates. We certainly do not have a bunch of "yes" men. If you all are privileged to sit in at a meeting of council, which of course you are at any time, you will understand what I mean. When we finish threshing it out, certainly there is no area which has been left unexplored and usually we have arrived at a decision which has proved to be most efficacious as far as the South Carolina Medical Association is concerned. That is what we are there for. I would like personally to thank each member of Council that I have worked with during the time I have been Chairman. I have never made a request of any member that that request has not been met with instant reception and a diligent attempt on the part



*Dr. Joseph P. Cain, President-Elect, has something to say at the microphone.*

of the person that was asked to do what we wanted of him. That also has been true of the entire South Carolina Medical Association. You remember back four or five years ago, particularly when we were having our rough time with the legislature on the naturopaths, we extended our activities way beyond the realm of Council. Probably every member in this audience who was in practice at that time was called upon to do his bit in contacting his representatives or in some way molding opinion which would help us in our effort. There again we met with 100% cooperation. I want to thank you for that cooperation.

Now, my report, today, will be in two parts. The first will be a resume of the work of the Council during the year, and second will be certain resolutions which have come out of this work and the work of committees that were appointed by Council during the year. These recommendations will be submitted by so-called Special Reports in most instances by the Chairman of the Committees who studied that particular project, and these recommendations will be made following my report.

I would like to ask Dr. Miller, and Dr. Mayer and Dr. George Dean Johnson and Dr. Waring to stand by for their participation in this report when I finish. (Reading Report)

"The problems confronting Council this year were more or less routine and have not been of the magnitude of some of the problems which we have faced during the last few years.

In the Legislative field there has been no attempt by the optometrists to renew their bill this year. However, we still have the naturopathy problem in the form of Dr. Mitchell from Seneca, who has been elected to the House of Representatives from Oconee County. He always has one or two bills in the hopper for which he is trying to gain support to license a few old time naturopaths. Also, the podiatrists have renewed their efforts to widen their scope of practice by legislation. With the full cooperation of our Legislative Committee, Executive Secretary, and the various Doctors over the State, we have successfully defended against these bills.

The Special Committee on Civil Defense, which was appointed by Council, has been discharged after four years of diligent work. The Council thanks Chairman Charlie Wyatt and his committee for a job well done. They were successful in creating interest and active participation where none existed before and were



partially responsible for the reorganization of Civil Defense on a state level and under competent and intelligent leadership. In disbanding our committee, it is the distinct understanding that our Association continue to cooperate with Civil Defense in South Carolina in whatever capacity we are asked.

The study of Social Security for Doctors was continued during the year and this subject is to be given to the House of Delegates by special report.

The Special Committee on a Permanent Home for the State Association continued its work during the year and its findings will be given by a special report.

The Council Committee on Public Relations was set up under the Chairmanship of Dr. Joe Waring, who has set up a steering Committee composed of Physicians in each city of the State where there is a newspaper or radio station, so that adequate liaison between our Association and these news media might be obtained. This Public Relations set-up, which includes the provision that Dr. Waring might consult with Professional Public Relations Firms at any time he might desire, has been in operation only a short while and will have its first big test so far, with this present State Meeting. The recommendations to the House of Delegates as to the future of such a committee will be made by special report.

The Mediation Committee has reported to Council through its Chairman, Dr. Roderick Macdonald, that the Committee has been fairly active this year and has had several meetings in order to mediate certain Medicare claims which were not covered in the schedule. The number of these claims was very large and the Committee is to be thanked for having tackled such a difficult task so diligently. So far as complaints of a medical nature were concerned, none of any consequence has been received.

The Council has received regularly reports from the South Carolina Medical Care Plan and has cooperated with this plan in any way in which it has been asked. A special resolution concerning a request by the South Carolina Medical Care Plan will be presented by special report."

Before we go into the Special Reports, I have a resolution, which was passed by Council, concerning a resolution sent to our Association from the state Medical Society of Wisconsin, which reads:

"WHEREAS, Traffic accidents each year kill more than 37,000 persons and injure another 1,400,000, causing not only tragic suffering and loss of life but costs exceeding five billion dollars in wage loss, property damage and medical services, and

WHEREAS, The attention of the nation has been effectively directed to some of the great problems and philosophers of human living through the issuance of special commemorative stamps as illustrated by the issues shown here, now therefore be it

RESOLVED, That the Postmaster General of the United States be petitioned to issue annually for five consecutive years, a special commemorative stamp on the theme of traffic safety, each year's stamp to receive its first day of issue from the capital cities of every state of the United States, and be it further

RESOLVED, That duplicate originals of this resolution, bearing the seal of the state Medical Society of Wisconsin, be sent to the Governor of Wisconsin, the United States Senators and Representatives from Wisconsin, the Postmaster General and the President of the United States, and the President, President-elect, and Executive Vice President of the American Medical Association;

And that facsimiles be sent to the American Medical Association delegates and alternate delegates of each state medical society, the insurance industry, the American Automobile Association, the National Safety Council and others interested in the prevention of traffic accidents—all with the express hope that they

will join this nationwide effort to use stamps as a means of delivering a daily reminder to the American people on the necessity of safe driving for longer, healthier living.

Adopted by the Council of the State Medical Society of Wisconsin in meeting duly assembled on February 28, 1959."

This resolution was presented to Council, who passes it on to the House of Delegates: (Reading)

"The South Carolina Medical Association, in session at Columbia, South Carolina, May 12, 1959, wishes to compliment the State Medical Society of Wisconsin in bringing to the attention of the Postmaster General of the United States, and the President of the United States, Dwight D. Eisenhower, the importance of traffic safety and the effort to commemorate it by issuing appropriate stamps from the various states in the United States.

"We wholeheartedly endorse this action and approve of the resolution which they have presented."

DR. CAIN: Do you want to refer that?

THE CHAIR: Thank you, Dr. Cain, that part of your report will be referred to the Reference Committee on Miscellaneous Business, the Wisconsin Resolution.

DR. CAIN: The next section of my report will be a special report by Dr. Ben N. Miller, whose committee has studied the problem of Social Security for doctors, for Council, during the past year and they will have certain recommendations in their report. Dr. Miller.

DR. BEN. N. MILLER, Columbia: House of Delegates, Dr. Cain, Dr. Crawford, soon after the annual meeting last year Dr. Cain asked the following people to serve on a committee to study the problem of Social Security for doctors: Dr. George Dean Johnson, Spartanburg; Dr. Thomas Parker, Greenville; Dr. Cathcart Smith, Conway; Dr. Louis S. Miles, Summerville. This committee met in Columbia on November 16, 1958 with all being in attendance except Dr. Miles, who was kept away because of his professional commitments.

Certain commitments were made by this committee which I will read only in summary. The Committee on the Study of Social Security for Doctors recommends that Social Security be disapproved at this time. The reasons are listed as follows: (1) Under the present system, payments for Social Security will be borne by future generations; and on this basis it is morally wrong. (2) Social Security is financially unsound. There is no contract. There is no relationship between the amount of money paid in and what is to be received. (3) If Social Security is accepted by the physicians, the profession will be liable to socialized medicine in its most vicious form.

With those feelings and commitments from the committee the following was asked of Council: (1) That basic information be supplied to the members of the South Carolina Medical Association, (2) That a plan of polling by mail be carried out to get a sampling of membership opinion, (3) That a formal hearing be held, during this meeting, if any member cares to discuss this with our committee.

You will all recall having received during the last few months a card asking for a vote. Today we have the report of this polling and it was compiled by Mr. Meadors and his office, which reads as follows: (See Chart)

As you can see from the chart out of 1400 cards mailed approximately 1000 were returned. Out of these returned cards those voting for Social Security without reservations numbered 429 or 49% of those votes tallied; those who voted in the negative numbered 439, which was 10 votes in favor of disavowing the Social Security, which reads 51%; so you see the percentage for Social Security was 49% against 51%. Then on Question No. 2,—are we in favor of Social Security on a voluntary basis if it could be obtained,



# RESULT OF POLL OF MEMBERS OF SOUTH CAROLINA MEDICAL ASSOCIATION ON INCLUSION OF PHYSICIANS UNDER THE OASI

Total Number of Cards Mailed: 1400  
Total Number Cards Returned: 989

## QUESTIONS:

1. Do you favor Social Security for doctors? Yes\_\_\_\_\_ No\_\_\_\_\_
2. Do you favor Social Security for doctors on a voluntary basis? Yes\_\_\_\_\_ No\_\_\_\_\_
3. Age\_\_\_\_\_

Age Group		Age Not Given	25 to 39	40 to 49	50 to 55	Over 55	Total
QUESTION	YES	4 (40%)	139 (40%)	133 (50%)	25 (35%)	128 (68%)	429 (49%)
NUMBER 1	NO	6 (60%)	194 (60%)	133 (50%)	45 (65%)	61 (32%)	439 (51%)
TOTAL		10	333	266	70	189	868
QUESTION	YES	9 (75%)	286 (77%)	238 (79%)	69 (78%)	178 (86%)	780 (80%)
NUMBER 2	NO	3 (25%)	88 (23%)	62 (21%)	19 (22%)	28 (14%)	200 (20%)
TOTAL		12	374	300	88	206	980

of that group, those voting in favor 780 or 80% of those casting votes, and those against it 200 or 20% of those casting votes. I do not think there is a great deal of advantage in breaking down the figures according to age groups. This will be available and will be published in *The Journal*. Suffice it to say that the young age group voted nearer even on the idea of Social Security, whereas the group above fifty-five voted in a ratio of 68% for and 32% against. Thank you.

THE CHAIR: Thank you, Dr. Miller, this part of the report will be referred to the Reference Committee on Legislation and Public Policy.

DR. CAIN: Gentlemen, several years ago Council appointed a committee to study the possibility of a permanent home for the State Association. A year later the state Association, itself, through action of the House of Delegates, became interested in this by voting \$5.00 per member to be taken from the dues and earmarked for a 'Permanent Home' each year. Today we have a report from Dr. Benny Mayer, who has been Chairman of that committee since its inception, and since this report deals directly with action taken by the House of Delegates, even though it is a Council Committee, we have asked Dr. Mayer to bring his report direct to the House of Delegates without an expression of any kind from Council, Dr. Mayer.

(Special Report) DR. O. B. MAYER, Columbia: "Mr. President, Dr. Cain, the Permanent Home Committee has functioned during the past year largely by correspondence.

The Committee, three to one, favors a Permanent Home located in Columbia.

Among the advantages offered by a Permanent Headquarters Building are:

- (1) Administrative activities can be more centralized.
- (2) Permanent storage facilities for records and historical data.
- (3) Prestige and evidence of the existence of a united medical profession to better fulfill the objectives of the Association.
- (4) Provides facilities for meetings of Council and Committees.
- (5) Provides a greater opportunity for leadership and convenience for members in transaction of Association business.

Central location because:

- (1) Natural location of the State Legislative activities.
- (2) Many Committee and Council meetings are already being held in Columbia.
- (3) Reduction in travel and long distance call expenses to and from Columbia to the present office.
- (4) More efficient and effective liaison with the Legislature.
- (5) Constant availability for consultation with members of the General Assembly.
- (6) Better opportunity to meet the ever increasing social-political inroads on medicine.

The Committee further believes the administrative offices should be centralized now even though the Permanent Home Building is not yet available.

Several possibilities for a Home, some at possible financial saving to the Association, have been considered:

- (1) Bid for the Confederate Home property now owned by the State.
- (2) Apply for a building site on State property.
- (3) Explore other channels as space in the new State Board of Health Building to be put up in the near future. (Dr. Peoples believes appropriate place could be provided.) It is recalled that technically the South Carolina Medical Association is the State Board of Health.
- (4) Explore City of Columbia for a site.

- or
- (5) Buy and build outright with no strings and operate independently.

There are foreseeable circumstances that probably would require Legislative action in the way of obtaining land by deed from the State.

The Association's Building Fund as of the first of 1959 was reported as \$7,385.06. The expected Fund by the end of the year would total \$14,000.00 in round figures.

The Committee believes that the desires and intentions of the Association regarding location and Permanent Home Headquarters should be clarified, and that the Committee be given further instructions and authority to carry out the Association's plans.

Permanent Home Committee:

Dr. J. Decherd Guess  
Dr. Richard W. Hanckel  
Dr. Kenneth G. Lawrence  
Dr. O. B. Mayer, Chairman"  
(Thank you) (Applause)

THE CHAIR: Thank you Dr. Mayer, that portion of the report will be referred to the Reference Committee on Reports of Council & Officers.

DR. CAIN: The next part of my report will be recommendations, given by Dr. George Dean Johnson, President of the South Carolina Medical Care Plan. Dr. Johnson.

DR. GEORGE DEAN JOHNSON: Mr. President, Dr. Cain, the plan that I am about to introduce is the result of long thoughtful consideration. For years Dr. Guess, who is the Medical Director of the Blue Cross-Blue Shield Plan has begged us to set up review or adjudication committees, statewide, on a regional basis. It is hard for a man in Greenville to decide something that happens in Georgetown or Mullins or Charleston, or Beaufort when he can't get all the facts and figures. I appointed a committee in the Blue Shield Plan, with Joe Cain as Chairman, and this is the recommendation that has been brought in and the Board of Directors of Blue Shield heartily endorses it.

"Recommendation that a committee on review and adjudication of the contested claims in Blue Cross and Blue Shield be set up over the state. There will be a committee for each medical district within the state under the chairmanship of the duly elected councilor for that district. Directors of the committee will be made up of one representative to be elected by the medical staff of each hospital within the district. This is to insure active participation and support of all hospitals and to insure adequate liaison between the committee and the various staffs in order that each one might know exactly what is going on. However, because in many districts the numerical pull of all of the hospitals would result in an unwieldy committee, it would be suggested that the Committee act in groups of five (5) on a staggered and rotating basis so that each member on the committee would serve several turns during any one year but would not have to meet every time. This would considerably reduce the work-load on the individual committee members and would still be a compact workable unit to consider the problems when they arise.

The other members of the Committee would be kept fully informed by copies of the proceedings which would be sent to them so that this information could be passed on to their respective staffs.

Meeting of this Committee would be held no more than once a month, if sufficient claims were not contested, then only on call of the Chairman, who would be notified by the Executive Director when such action was deemed necessary.

(And to me this next paragraph is the most important single part of this committee meeting.)

"It would be requested that information submitted by Blue Shield to this Adjudication Committee be a part of any information which would identify the patient, the hospital or the doctor concerned." Thank you.

THE CHAIR: Thank you, Dr. Johnson, this part of the report will be referred to the Reference Committee on Insurance, Blue Cross and Blue Shield.

DR. JOE CAIN: That completes my report.

THE CHAIR: Thank you, Dr. Cain. This whole report will be referred to the Reference Committee on Reports of Council and Officers.

The next report will be that of the Treasurer, and Mr. Meadors will give that report in the absence of the Treasurer.

M. L. MEADORS: Dr. Crawford, ladies and gentlemen, I might say the reason Dr. Stokes is not here is because he had to leave to attend the funeral of his father-in-law which is this afternoon.

Not having prepared the report and not having a copy of what he had, this will be brief and will just

give you the highlights as revealed by the recent audit of the Association's financial affairs.

During the year 1958 the Association collected, including the dues to the American Medical Association, a total of \$113,301.00. All of the dues to the A.M.A. in the amount of \$30,782.00 were remitted to Chicago during the year. Included also in the figure that I gave you of \$113,301.00, were the collections for the American Medical Education Foundation, the voluntary \$10.00, the total of which was \$6,210.00. In addition to this \$6,210.00, contributed voluntarily by the various members of the Association, the Association at the direction of Council made an additional contribution to the A.M.E.F., so a total of \$8,199.00 was transmitted to the Education Foundation during the year.

For the total years compilation, the items remitted were \$94,583.00, including those in the form of dues and year to year contributions to which I referred, leaving an excess of revenue over expenses in excess of \$18,000.00.

The Association was able to add to the investments, during the past year, a considerable amount. There was at the end of the year in the Permanent Home Fund a total of \$7,387.00. Other investments of the Association were approximately \$41,000.00 at the close of the year 1958.

Finally, the Budget adopted by Council, previous to the beginning of last year was \$58,800.00. The actual amount used of the Budget was \$54,857.48." Applause.

THE CHAIR: Thank you, Mr. Meadors, we will refer this report to the Reference Committee on Reports of Council and Officers.

THE CHAIR: The next report will be that of the Delegate to the A.M.A., Dr. Weston.

DR. WILLIAM WESTON, JR., Columbia: Mr. President, fellow delegates, this is my report on meeting of the American Medical Association in San Francisco, California, June 23-27, 1958.

"Report of A.M.A. and American Bar Association Liaison Committee:

This committee has advised that there should be closer cooperation between these organizations.

Report of Public Relations Department

It is recommended that the American Medical Association join with other interested groups in setting up an expanded voluntary program, coordinated by the National Better Business Bureau, which will seek to eliminate objectionable advertising of over-the-counter medicines.

It is recommended that the American Medical Association become a sustaining member of the National Better Business Bureau, giving evidence of its willingness and desire to support this organization in its worthwhile activities.

Report of A.M.A.—American Hospital Association Liaison Committee

Final arrangements have been made for the joint sponsorship of the A.M.A. and the AHA of a film on in-hospital medical professional liability problems.

Status Report of Activities of Commission on a National Emergency Care Plan

Following a request from the Federal Civil Defense Administration on December 10, 1956, and the subsequent recommendation of the Council on National Defense, the A.M.A. Board of Trustees, on February 9, 1957, authorized the Council to proceed with the research problem and initiation of a plan of study to establish criteria for the provision of medical care of the surviving population, casualty and noncasualty, in the event of an enemy attack on this nation.

The development of a realistic plan for the care of the surviving population and the problem of public health and environmental sanitation that would be present in the event of enemy attack on this nation is a tremendous task involving many and varied prob-



lems that concern the entire medical profession. Depleted facilities, supplies, and professional personnel must be so utilized and adjusted to prevent a breakdown of medical and health services. The concept of doing the most good for the greatest number within greatly limited capabilities must prevail.

#### A.M.A. News

The Board of Trustees approved the establishment of a newspaper to be published bi-weekly for distribution to approximately 200,000 physicians. The newspaper will be edited with the idea of keeping the physician informed in the medicoeconomic field, concentrating on news not now carried in the other A.M.A. journals.

#### Report of Council on Medical Service

The wide acceptance of health insurance makes it mandatory that its effectiveness in meeting patient needs be subject in all aspects to constant appraisal. The dynamic character of the prepayment institution, both in expansion of types of protection and enrollment increases, brings new problems as well as benefits. The medical profession has recognized and continues to accept its responsibility in the development of health insurance programs for those among the population who desire to participate in such programs. The A.M.A. believes that plans, prepayment or insurance to finance the costs of medical care, in themselves influence the quality and quantity of medical care. The A.M.A. believes that any voluntary prepayment medical or insurance plan will best serve the medical and economic interest of the beneficiary if certain practices are observed.

The main objectives of medical society-sponsored voluntary prepayment medical benefit plans are (1) to provide the public, represented by the subscribers, an economic method of meeting the costs of medical care by providing, on a sound financial basis, the services of physicians or a high proportion of the cost of such services, and (2) to support the best standards of medical practice of a professionally qualified, independent medical profession.

#### Committee on Aging

The Committee on Aging has been urging medical societies to take an active interest in the problems of aging and has held regional meetings to stimulate this interest. One of the objectives sought was the establishment of committees on aging in all states and in many of the county medical societies.

#### Report of Reference Committee on Legislation and Public Relations

The resolutions in opposition to the Forand type of legislation were approved, as it is felt that national compulsory health insurance would constitute a distinct and radical departure from our American system of free competitive enterprise.

Respectfully submitted,"

William Weston, Jr., M. D.

Delegate to the American Medical Association from South Carolina.

(Applause)

THE CHAIR: Thank you, Mr. Weston. Dr. Johnson, do you have anything you would like to add?

DR. GEORGE DEAN JOHNSON: Nothing more to add, Mr. President.

THE CHAIR: I will refer Dr. Weston's report to the Reference Committee on Reports of Council and Officers.

At this time I want to extend the floor to Dr. Cain.

DR. JOE CAIN: Gentlemen, Dr. Joe Waring, who is the chairman of our Committee on Public Relations has a report from Council to make to the House of Delegates. This report is recommended to you by the Council for year acceptance. Dr. Waring.

DR. JOE WARING, Charleston: I would like briefly to repeat what Dr. Cain said a little while ago about Public Relations and tell you a little more about what

we are trying to do. This particular interest in Public Relations activity came up rather a short time ago and we had to work more or less from scratch, utilizing certain funds or part of certain funds which had been put aside sometime back for the purpose and never used. All we could do at the time was to try to concentrate our effort on publicity of this meeting, as opposed to the concept of real public relations, and then to do what we could with public relations in publicizing the actions and recommendations and efforts of this body. We have had a number of releases prepared for us by a professional public relations firm, which we have utilized on a strictly short-term basis. These have found a fairly good acceptance and we have prepared for revision reports of the various committees, those which would seem to be of particular interest to the public. These obviously will not be released until action has been taken tomorrow on whatever recommendations are carried in them.

It is also proposed to produce a number of feature stories for the newspapers which might be published gradually concerning what the professional speakers have to say, during the program.

We set up a committee over the state of people who had some connection with their local news sources, hoping that by a little local pressure we could get a better promise of publication. We still can not report how well this has taken but we feel that there probably has been pretty good acceptance and much of that I feel we can credit to the Committee.

It was the feeling of Council, and Dr. Cain will correct me if I am not exact in this, that this effort had been worthwhile or promised to be worthwhile and should be continued on a little larger scale. I think Council felt we were not prepared to go in too deeply until we see how matters work out over a little longer time and with a little less immediate pressure. It was felt that the Director should be retained at a salary and that a professional public relations firm should be employed, not on a contract or retainer basis, but from time to time as approved. It is quite possible that there will be long periods of time when there would be no special occasion for this committee to function and then, again, there might be opportunities or urgencies for rather considerable action.

It was guessed that a program such as was discussed at Council meeting might be initiated for a cost of about Thirty-Five Hundred (\$3500.00) Dollars for the year. That is a guess, it might be a little more, it might conceivably be even less, and my understanding is that that is the recommendations of Council. Right, Dr. Cain?

DR. CAIN: Gentlemen, Dr. Waring is a little modest in explaining just exactly what we recommended. We recommended that he be paid Twelve Hundred (\$1200.00) Dollars a year salary, as director and that the difference in the amount recommended (\$2300.00) and the amount of his salary be utilized to pay for professional advice if and when we need it. In other words, we recommend that the director of this Committee be retained at \$100.00 a month or \$1200.00 a year and that we spend up to \$2300.00, if that amount should be necessary during the year for professional consultation.

THE CHAIR: Thank you, Dr. Waring and Dr. Cain. I will refer this part of the report to the Reference Committee on Legislation and Public Policy. (Announcement as to change in Reference Committee)

At this time I would like to add Dr. James L. Duncan to the Reference Committee on Legislation and Public Policy. Dr. James H. Gressette has been appointed as Chairman of that committee to replace Dr. Charles Wyatt, of Greenville, who is sick.

The next reports are those of the Standing Committees.



These Committee Reports have already been printed in the Journal. I don't think it will be necessary for the Chairmen to read all of their reports, but I will call on each chairman for supplementary reports.

#### STANDING COMMITTEES

THE CHAIR: The first is the Committee Report on Cancer, Dr. Pratt-Thomas, Chairman.

DR. PRATT-THOMAS: No additional report.

THE CHAIR: I will refer that to the Reference Committee on Public Health.

The next is the report of the Insurance Committee, Dr. R. W. Hanckel, Chairman. Dr. Hanckel is not here, I will refer that report to the Reference Committee on Insurance, Blue Cross, Blue Shield.

There is no report from the Advisory Committee to the Woman's Auxiliary.

The next report is that of the Committee on Rural Health, Dr. Keith Sanders. I think Dr. Sanders is sick, too, and we will refer this report to the Reference Committee on Public and Industrial Health.

The next is the Committee on Historical Medicine, Dr. Waring, Chairman.

DR. WARING: No additional report.

THE CHAIR: That will be referred to the reference committee on Miscellaneous Business.

The next is the Committee on Civil Defense, Dr. Bachman Smith, recognized.

DR. BACHMAN SMITH, JR., Charleston: Mr. President and Members of the House of Delegates, this is a supplemental report submitted by Dr. Charles Wyatt, who is unable to be with us. (Reading)

"Since the rendering of the report of this Committee as published in the *Journal of the South Carolina Medical Association* on Page 151, some very definite trends have been developing. Among them is the preparation of a "Plan of Survival" for the State of South Carolina, being prepared by the Civil Defense Director's Office under the direction of two retired Army Officers, General Cork and Colonel Wilson. This very definite action by this newly created organization of the state government is most encouraging, and we hope it will cause us to renew our efforts as an organization to do our part.

Another matter that was not reported in our original report was the requirement of an evacuation plan of patients for all small hospitals within the state. As you know, it is one of the requirements of accreditation board of the AMA Commission, that a hospital has to have a definite plan for the evacuation of patients in event of a catastrophe. Your Committee requested at the meeting of the House of Delegates last year that we be given the authority to have this requirement apply to the other hospitals within this state, and the request was granted. We have done some studying on this, and have reviewed the plans of some other states, and hospitals, but we have not instituted this project for the following reasons:

1. We have not had the opportunity to go into this with the State Hospital Association, and
2. Now that the State Civil Defense Department has begun to function we will be relieved of this responsibility.

With the appointment of a Civil Defense Director of the State, it has been the pleasure of your chairman to have close liaison with this state office. We have been asked to advise in several matters, and have been very happy indeed to comply. We have, in conjunction with the Director of Civil Defense, planned a meeting on the 27th of May 1959 to be held in Columbia. The details are in the process of being worked out now, but we can tell you this, that the Governor of South Carolina has been asked to be present and say something, and we are also going to have the Director of Civil Defense of the Region 3 and his Medical Director present to give us some information on the latest developments of Civil De-

fense, especially the organization. At this meeting also, will be Lt. Col. Goldstein of the Walter Reed Medical Center, Washington, D. C., who will talk on some phase of the care of casualties. We would like to urge the Members of this association, to make plans now to attend this meeting, and especially do we urge those of you who have been designated by your County Society or your Councilor to head up the Medical service of your particular county or district to be present. You will be reminded of this again, and we would ask that you observe the newspapers for further news concerning this meeting. We would certainly like to have as many doctors and ancillary personnel present as possible.

We would like to, at this time, recommend that some one particular member of this organization, preferably some member in or near Columbia, be selected to represent the State Association as the Deputy for Medical Services, to serve under the Director of the State Civil Defense, and, further, that this committee be dismissed."

THE CHAIR: Thank you, Dr. Smith. I will refer that report to the Reference Committee on Miscellaneous Business.

The next committee is the committee on American Medical Education Foundation. Does anybody have a report from that Committee?

If not, I will refer that to the Reference Committee on Miscellaneous Business.

The next is the Report of the Committee on Infant and Child Health, Dr. Walter Hart, Chairman, do you have any supplementary report? If not, I will refer that to the Reference Committee on Public Health and Industrial Medicine, and also to the Reference Committee on Amendments to Constitution and By-Laws.

The next is the Report from the School Health Committee, Dr. J. R. Parler, Chairman. If there is no supplemental report we will refer that to the Reference Committee on Public and Industrial Health.

The next is the Standing Committee on Welfare and Rehabilitation,—if there is no supplemental report this will be referred to the Reference Committee on Miscellaneous Business.

The next is the report of the Committee on Industrial Health, Dr. John M. Perry, Jr., Chairman, is there any supplementary report?

DR. JOHN M. PERRY, JR. Dr. Crawford I have no further supplementary report, however, there is a motion to be entertained by the House of Delegates which I will take to the Reference Committee tonight and we will bring it back tomorrow.

THE CHAIR: Thank you, Dr. Perry, that report will be referred to the Reference Committee on Public & Industrial Health.

The next committee report will be that on Legislation & Public Policy, Dr. Frank Owens, Chairman.

DR. FRANK OWENS: So long as the legislature is in session no final report can be given by the Legislation and Public Policy Committee. We have to issue an 'open end' report. Since the report published in *The Journal* there has been no material change in any of the bills in which we are interested. Those bills which we felt were not for the best interest of the people of the state, so far as health was concerned, they have either been withdrawn or they are in committee and perchance will not come out. That is an up-to-date report.

THE CHAIR: Thank you Dr. Owens. This report will be referred to the Reference Committee on Legislation and Public Policy.

The next is the Report of the Committee on Liaison with Allied Professions, Dr. William R. LaRoche, Jr., Chairman. If there is no supplemental report it will be referred to the Reference Committee on Miscellaneous Business.

The next Committee Report will be on the Aged, Dr. Cathcart Smith, Chairman, Dr. Smith.

DR. CATHCART SMITH, Conway, S. C.: Mr. President, in view of the fact that this report has been published in *The Journal* and in view of the fact that this will be discussed in more detail at the meeting of the Blue Shield Corporation, I would like to ask permission to make my report at that time, instead of at the present.

THE CHAIR: Thank you, Dr. Smith. That will be referred to the Reference Committee on Insurance, Blue Cross, Blue Shield.

The next report is that of the Maternal Health Committee, is there any supplementary report to offer? If not, the report will be referred to the Reference Committee on Public and Industrial Health.

The next report, regarding Position of the Medical Profession in South Carolina to Social Security, has already been referred to the Reference Committee on Legislation and Public Policy.

The next report is that of the Medical Standards Committee for Driver Certification, Dr. Ben Miller, Chairman. That will be referred to the Reference Committee on Miscellaneous Business.

The next is the report of the Executive Committee of the South Carolina State Board of Health to the South Carolina Medical Association, is there any supplementary report, Dr. W. R. Wallace, Chairman.

DR. W. R. WALLACE: No additional report.

THE CHAIR: That will be referred to the Reference Committee on Industrial and Public Health.

Now, there are some committees that have made no reports, so far. The Committee on the Care of the Patient, is there any report from that Committee at this time?

Is there any report from the Committee on Coroners and Medical Examiners?

DR. PRATT-THOMAS (Recognized by The Chair): Mr. President, it would appear that this committee has been as dead as its subject. (Reading)

"Although this Committee has held no regular meetings, the Chairman has investigated many facets of this problem.

The problem is many-sided and it is essential that it be recognized that this is not a question of obtaining general scientific autopsies, but those which are *bona fide* medico-legal cases.

Larger counties with hospital pathologists should be able to solve their own problems; those who do not have such facilities should begin a grass roots movement to interest their legislative delegations in this problem, as this is, essentially, a legislative matter.

In this regard, it would probably be better to have a chairman of this committee from an area in which this problem is pressing, rather than from Charleston where a modified medical examiner system is in operation. Close cooperation with the Association's attorney is essential for the proper formulation of legislative proposals.

Your chairman did not feel that now was the time to attempt to uproot a long established system, particularly one which would be costly to the State.

The laws relative to Coroners should be made more specific as regards their duties. After this is accomplished, the possibility of developing an examiner system through some established state agency, such as S.L.E.D. should be investigated.

We feel that this Committee should be continued.

H. R. Pratt-Thomas, M. D.  
Chairman."

THE CHAIR: Thank you, Dr. Pratt-Thomas, I refer that report to the Reference Committee on Legislation and Public Policy.

The next report is that of the Committee on Certification Committee? Dr. Galloway (recognized)

Dr. JAMES B. GALLOWAY, Columbia: "The South

Carolina Medical Association Committee on Certification of Psychologists, appointed following the 1958 annual meeting, met August 4, 1958 in Columbia, jointly with similarly appointed committee from the Columbia Medical Society and the South Carolina District Branch of the American Psychiatric Association. Several doctors from various areas of the State were contacted prior to the meeting, informed of the situation and invited to attend.

Information has been collected from the South Carolina Psychological Association, the American Psychiatric Association and locally. This, along with the Joint Resolution of the American Medical Association, American Psychiatric Association and the American Psycho-analytical Association was presented and discussed. The Committee whole-heartedly endorsed the Joint Resolution of the national organization.

The South Carolina Psychological Association, with the help and consultation of a Special Legislative Consultant of the American Psychological Association has been for several years making plans for what they term "certification enactment for psychologists." Their aims are multiple. They are specifically patterned after New York and California laws. The desirable aims are obvious. The dangerous aims are obscure. The laws in New York and in California have resulted in the actual licensing of psychologists to practice counseling and psychotherapy on emotionally ill patients.

There is every evidence that the Psychological Association will not rest until they have realized the type of legislation indicated. This demands continued watchfulness by the South Carolina Medical Association to protect the public against the practice of medicine by non-physicians.

The following resolution is therefore submitted by this Committee:

(Resolution) The Committee on Certification of Psychologists of the South Carolina Medical Association, having studied the problem diligently, are in complete accord (sympathy) with the expressed intent of the South Carolina Psychological Association in the advancement and regulation of the practice of their profession.

This Committee strongly and specifically recommend the continued fundamental principle that the diagnosis and treatment of nervous and mental illnesses, like other illnesses, shall remain a medical responsibility."

THE CHAIR: Thank you, Dr. Galloway, that report will be referred to the Reference Committee on Legislation and Public Policy.

At this time I would like to ask Dr. William Weston if he will come to the platform and bring Colonel Charles with him.

DR. WILLIAM WESTON, JR. Mr. President, fellow delegates, this is Colonel Charles, who is the Chief Medical Officer at Fort Jackson, who will speak to us on some phase of Civil Defense Survival, Colonel Charles.

COLONEL CHARLES, Fort Jackson: Mr. President, ladies and gentlemen, I am not authorized to speak for Civil Defense because I am an Army man but I would like to touch on a few phases of Civil Defense, as we are tied up very closely with this. For the last four years I have been on the faculty of the Armed Medical Service School down at Fort Sam Houston as well as at Brooke Army Hospital whereby we had to set the pattern for the Federal Services for a mass casualty handling and were tied in most closely with the Federal Civil Defense, as well as with the intra-military organizations. This is a subject I could talk a half day on, so Mr. President, please let me know when my five minutes is up.

The thing I want to impress on all of you, as representatives from your community, that it is absolutely



necessary to get organized for survival and for a handling of mass casualties in your community. Now, I will grant you, if you talk to some of the Atomic people they will say "Well, if you drop a bomb on Columbia, there won't be any Columbia." Well, sure it won't, but there will be communities in the vicinity who will be partly damaged. If you kill them out on the street, all right, they are just dead, and all of us are going to die. The people we want to look out for are these survivors, and when it becomes a critical item we must look out for the survivors who can carry on the functioning and the rehabilitation of the country. We are actually teaching, down there at Brooke, the idea that the important people to help survive, and store away and rejuvenate and rehabilitate are the ones who are below the age of forty, even. A man sixty-five or seventy years old—if you were going to pick out, and this is a very critical thing, to save the life of a man sixty-five or seventy years old or a twenty-five year old man, and the country has had twenty million deaths, there should be no doubt who you would pick out. But in order—this will scare everybody so, you can't talk it freely among the laymen, so the thing to do is to start training your community in the handling of natural disasters. The City of San Francisco is one of the most enthusiastic, if not the most enthusiastic metropolitan center because they have had several fires, they have had an earthquake, in fact once a week you have to straighten up your pictures on the wall and dishes in your cabinet if you live in the San Francisco area. They know these things. Galveston, Texas knows them because they lost in 1900 three, four, or five thousand people. They know that something can happen because Texas City has happened. Those places know it. But in a small way throughout the country we want every community to organize.

Now, I will grant you there is the engineering, sanitation and the refugee problem and all like that, but for us, as doctors, our main interest is organizing the hospital facilities and there are several principles in that. You have got to have your plan, that is all there is to it, you have got to have a plan, first. Then handling of a group of casualties, we will say mass casualties, whether they are fifty or a thousand, depending on your capacity and depending on the interest, the principle is to have an organization and all the hospitals in the community to be unified and have a plan.

Then you bring in the casualties. It is a progressive slow thing, this bringing in the casualties to the hospital or to the sorting station. Have them sorted and separated into four classes, 1) the minimal injury, which you can usually patch up and send them on back home; 2) the immediate case, which needs treatment right now, we will say like a puncture wound in the chest or a severe fracture of the femur with an external hemorrhage, and things like that, any case where the man needs treatment right now to save his life. And 3) the delayed case—that is the person with a major injury or injuries but who can be set aside and resuscitated and taken care of without operation for three, five, ten, twenty-four hours, if necessary, until you have finished up with your immediate people.

Classification must be according to the degree of injury and not according to the social status. We must eliminate the idea of individual care of patients in this thing. For instance, we have been indoctrinated from medical school up that as an individual doctor when we assume responsibility for an individual patient that is our bounden duty. But in this we must assume the military attitude of the greatest benefit to the greatest number, and if the president of the bank is lying here injured and a twenty-five year old man lying down here injured, who is a laborer, take the

25-year old man first, don't classify the people on a social basis.

Another problem that we have to revise our attitude toward is group practice. Now, in every hospital somebody must be the chief and this plan must lay down who the chief is going to be and who is going to do this and who is going to do that. And actually, because authority and classifying these people is such an important thing, it is almost a God-given thing in which you act as God in saying we will not do anything for this person but we will do something for that one. To start off, at least, the authority should be the senior surgeon or the most experienced person in the community. I can remember down in Florence, where there was old Dr. McLeod, not James, his son, but when I was a kid you couldn't die in Florence County or in the Pee Dee section without old Dr. McLeod shaking his jowls at you. The reason for that was, he didn't know any internal medicine to amount to anything, but the reason for it was he was a surgeon who was used to assuming major and critical responsibilities day in and day out and he could do it, and he could do it with a great deal of aplomb. And that is the type man you need to start sorting these patients because everybody is panicky. Now, you must have your para-medical people organized. I would be willing to bet that right now I could call up Fort Sam Houston, Texas, and tell them that a thousand patients would start rolling in there at the rate of a hundred an hour, in two hours, and if we could get in a plane and land down there in four hours, which was the approximate flying time, we would see that hospital functioning, progressively taking in these patients, classifying them, sorting them, resuscitating them and operating on the ones who needed it.

Now, another thing we must revise our thinking about, we must fall back on the military practice of medicine, instead of the civilian practice of medicine in handling injuries and debride wounds and leave them open with just a light dressing over it and hold them until autolysis for the next seventy-two hours or so will neutralize the infection and then later on, when you have time, do a secondary closing of the wound.

I was commanding officer of a general Hospital in southern Japan, 90 miles across from Fusan and we had these casualties pouring in from Korea all the time and actually, say we would get 300 casualties in by plane in a few hours, we could tell whether a group of new surgeons had come from the United States and were operating over in Korea by the infection. In a couple of weeks somebody would beat them on the head until they had gotten the idea of debriding and the infections cleared up.

The main thought I want to leave with you is to organize and have group practice. Anytime I can help any of you, I will be glad to." (Applause)

THE CHAIR: Thank you, Colonel Charles. We certainly appreciate your taking your time to come up and give us a few words on Civil Defense.

The next report will be the report of the Crippled Children's Society. (There was no report) That will be referred to the Reference Committee on Public and Industrial Health.

The next report is from the Special Committee on Workman's Compensation Fee Schedule—Dr. W. W. Edwards.

DR. W. W. EDWARDS, Greenville: "Mr. President, Members of the House of Delegates,

May 12, 1959.

House of Delegates

South Carolina Medical Association.

Your Special Committee on revision of fee schedule for services rendered under the Workmen's Compensa-



tion Law wishes to submit for your consideration the attached revised schedule.

The level of fees for industrial accidents, as set forth herein, is felt to be fair and reasonable. Moreover, it is more in keeping with the prevailing fees for non-compensation cases over the state.

This schedule is intended as a suggested schedule only; one which may be used as a guide by the Industrial Commission in approving charges of physicians and surgeons for services rendered.

Respectfully submitted,  
W. W. Edwards, M. D.  
Chairman, Committee on Revision  
of Fee Schedule  
Frank C. Owens, M. D.  
John A. Siegling, M. D.  
R. L. Crawford, M. D.  
George H. Bunch, M. D.

Therefore, Mr. President, your Special Committee recommends the adoption of this schedule to be used by the Industrial Commission as a guide in approving charges of physicians and surgeons for services rendered.

#### OUT-PATIENT SERVICES

##### VISITS AND EXAMINATIONS:

Visits within city limits

	First	Subsequent
Office -----	\$5.00	\$4.00
Home -----	5.00	5.00
Hospital (Per day) -----	4.00	4.00
Special visits to home or hospital between 10 p. m. — 7 a. m. —	\$10.00	

##### EXAMINATIONS BY SPECIALISTS:

(Specialist is defined to mean one who devotes more than 50% of his time to one specialty.)

Consultation, internist, orthopedic, surgical, etc. -----	\$ 15.00
Genito-urinary examination with cystoscopy -----	35.00

##### CLINICAL LABORATORY TESTS:

Red, white and differential blood counts including instrumental colorimetric hemoglobin estimation -----	5.00
Blood smear for malaria -----	2.00
Urinalysis, routine chemical and microscopic -----	2.00
Blood Wassermann (complement-fixation) -----	3.50
Blood Kahn (precipitation) -----	2.50
Venepuncture and procuring of blood for serology without serological examination -----	1.00
Spinal fluid Wassermann (complement-fixation) -----	3.50
Chemical examination of blood complete, including creatinin, urea, dextrose, nitrogen (or NPN) and uric acid -----	15.00
Sputum examination for tuberculosis (Plain smear) -----	2.00
Determination of basal metabolic rate ---	7.50
Charges for other laboratory procedures in accordance with those usually charged in the community.	

#### IN-PATIENT SERVICES

NOTE: The fees for surgical services listed herein include fourteen (14) days' routine post-operative care but are exclusive of hospital charges, clinical laboratory, anesthetists' and x-ray fees. Fees for visits and dressings after fourteen (14) days' completed post-operative care are the same as those listed as hospital, home and office visits under Out-Patient Services. If two or more surgical procedures are performed by the same physician on the same patient concurrently or immediately successively (e.g., repair of unilateral indirect inguinal hernia and operation for varicocele) the fee for the two or more procedures will be the greater or greatest fee plus one-

half each smaller fee or fees. The fee for two or more such concurrent operations will never exceed twice the greater or greatest fee. If two surgical procedures are performed by two different surgeons on the same patient concurrently or immediately successively (e.g., intervertebral disc operation and vertebral fixation), the fee for each surgeon will be seventy-five per cent of the fee listed for each operative procedure.

#### SPECIAL SERVICES:

Detention with patient in critical condition at home or hospital	
First hour—8 a.m.-7 p.m.-----	\$ 15.00 to \$ 25.00
First hour—7 p.m.-8 a.m.-----	15.00 to 35.00
Each additional hour -----	10.00
Surgical Assistant's fee:	
First hour or fraction thereof	25.00
Each subsequent half hour or fraction thereof -----	15.00

#### EXAMINATIONS—SPECIAL (For diagnostic purposes)

Endoscopy	
Bronchoscopy, with or without biopsy ----	40.00
Bronchoscopy, with removal of foreign body	75.00
Bronchoscopy, subsequent to initial bronchoscopy -----	20.00
Esophagoscopy, with or without biopsy or dilatation -----	50.00
Esophagoscopy, with removal of foreign body -----	50-100.00
Esophagoscopy, subsequent to initial esophagoscopy with or without dilatation--	25.00
Gastrosocopy -----	35.00
Culdesocopy -----	35.00
Peritoneoscopy -----	35.00
Proctoscopy -----	10.00
Sigmoidoscopy -----	15.00
Thoracoscopy, diagnostic, with or without biopsy -----	25.00
Paracentesis	
Paracentesis, abdomen, diagnostic -----	25.00
Paracentesis, joint, diagnostic (joints, bursa, ganglion cysts, tendons or tendon sheaths) -----	10.00
Paracentesis, pericardium, diagnostic -----	25.00
Paracentesis, tympanum, diagnostic -----	10.00
Sternal puncture, diagnostic -----	20.00
Thoracentesis, diagnostic -----	20.00
Paracentesis, abdomen, therapeutic -----	10.00
Paracentesis, joint, therapeutic (joints, bursa, ganglion cysts, tendons and tendon sheaths) -----	10.00
Paracentesis, tympanum, therapeutic -----	10.00
Paracentesis, pericardium, therapeutic -----	10.00
Thoracentesis, therapeutic -----	10.00

#### X-Ray Preparation

Arteriography or phlebography including injection of contrast medium but excluding X-ray fee -----	50.00
Bronchography, including anesthesia and instillation of contrast medium but excluding X-ray fee -----	25.00
Myelography, including operative preparation and removal of contrast medium but excluding X-ray fee -----	35.00
Pneumoencephalography, including operative preparation but excluding X-ray fee -----	50.00
Ventriculography, including operative preparation but excluding X-ray fee -----	75.00
Pneumoperitoneum -----	25.00

#### Autopsy

\$50.00 to 100.00 depending on completeness of examination.

#### Miscellaneous

Electro-encephalography with interpretation	20.00
---	-------

Lumbar puncture, including local anesthesia and obtaining fluid -----	15.00
<b>SURGERY—UNCLASSIFIED:</b>	
Abscess, deep (including ischio-rectal) ---	50.00
Abscess, superficial or furuncle, <i>without aftercare</i> -----	7.50
Adenectomy, cervical or inguinal (minor) -----	25.00
Adenectomy, cervical or inguinal (radical) -----	150.00
Breast tumor, small benign, excision -----	50.00
Breast, resection of, simple -----	75.00
Breast, resection of, radical including axillary nodes -----	200.00
Breast abscess, deep, <i>without aftercare</i> -----	30.00
Carbuncle, <i>without aftercare</i> -----	25.50
Depuytren's contracture -----	100.00
Fistula-in-ano, operation for -----	75.00
Fistula, recto-vaginal -----	125.00
Fistula, vesico-vaginal -----	150.00
Hemorrhoidectomy -----	75.00
Ulcer, varicose, excision with skin graft --	150.00
Varicose veins, injection treatment, each injection -----	7.50
Varicose veins, one leg, operation for ----	100.00
Varicose veins, both legs, operation for --	175.00

#### **SURGERY—ABDOMINAL:**

Needle Biopsy -----	35.00
Abscess, liver, operation for -----	150.00
Colostomy -----	150.00
Fecal fistula, abdominal, operation for ----	150.00
Gastrectomy (partial) -----	250.00
Gastroenterostomy -----	200.00
Gastrostomy -----	150.00
Herniotomy, diaphragmatic -----	250.00
Herniotomy, ventral -----	150.00
Herniotomy, inguinal or femoral, unilateral -----	125.00
Herniotomy, inguinal or femoral, bilateral --	175.00
Herniotomy, with intestinal resection -----	250.00
Intestinal obstruction, operation for, without resection -----	150.00
Intestinal obstruction, operation for, with resection -----	250.00
Laparotomy, exploratory -----	100.00
Laparotomy, and drainage, general peritonitis -----	150.00
Pyloroplasty -----	200.00
Splencetomy -----	200.00
Ulcer, gastric or duodenal, operation for --	150.00
Intestinal perforation, closure of -----	200.00

#### **SURGERY—BURNS AND TRAUMATIC WOUNDS:**

<b>Burns</b>	
List percentage of body surface involved, location of involved areas, age of patient. (Does not include skin grafts.) -----	
Initial treatment, first degree, where no more than local treatment necessary -----	7.50
Dressings, initial or subsequent under anesthesia, small -----	20.00
under anesthesia, large or with major debridement, per hour -----	45.00
without anesthesia, small, office or hospital -----	9.00
without anesthesia, medium (whole face or whole extremity, etc.) -----	15.00
without anesthesia, large (More than one extremity, etc.) -----	20.00
<b>Traumatic Wounds</b>	
Minor, <i>without aftercare</i> -----	10.00
Moderate, <i>without aftercare</i> -----	25.00
Extensive, <i>without aftercare</i> -----	30.00
Punctured, <i>without aftercare</i> -----	10.00
Foreign body removal, <i>includes aftercare</i> -----	10-50

#### **SURGERY—NEUROSURGERY:**

Aneurysm, intracranial, operation for ----	250.00
Auditory nerve section -----	150.00
Brain abscess, excision of -----	150.00

Brain abscess, primary tapping of -----	100.00
Brain abscess, subsequent tapping of -----	25.00
Brain tumor, operation for -----	200.00
Carotid ligation for intracranial arterio-venous fistula or aneurysm -----	100.00
Chordotomy -----	125.00
Craniotomy, exploratory, bilateral (burr holes) -----	150.00
Craniotomy, operative, unilateral -----	250.00
Gasserian ganglion, posterior root section --	150.00
Gasserian ganglion, injection of alcohol ---	50.00
Hematoma, extradural, operation for -----	150.00
Hematoma, subdural, operation for -----	200.00
Laminectomy -----	200.00
Neuroma, superficial, resection of -----	50.00
Nucleus pulposus or intervertebral disc, ruptured, extruded or crushed, operation for, with fusion -----	250.00
without fusion -----	200.00
Peripheral nerve, suture or lysis of -----	150.00
Prefrontal lobotomy -----	200.00
Scalenus anterior syndrome, operation for --	75.00
Supraorbital nerve, evulsion of -----	50.00
<b>Sympathetic nervous system, operations:</b>	
Unilateral resection -----	150.00
Bilateral resection -----	250.00
Presacral plexus resection -----	150.00

#### **SURGERY—NOSE AND THROAT:**

Abscess, oral (not to include dental or periodental) -----	5.00-20
Abscess, pharyngomaxillary space, external drainage of -----	100.00
Laryngoscopy, direct with biopsy of tumor -	30.00
Tracheotomy -----	75.00
Nasal bones, fracture, reduction of -----	20.00
Nasal bones, open reduction -----	75.00
Nasal septum, submucous resection of ----	100.00
Sinus, ethmoid, radical operation for, external or intranasal -----	150.00
Radical external fronto-spheno-ethmoid operation -----	150.00
Sinus, frontal trephination -----	75.00
Sinus, maxillary, intranasal anastomy (antrum window) -----	50.00
Sinus, maxillary, radical operation for ----	100.00
Sinus, sphenoid, intranasal drainage of (sphenoidectomy) -----	50.00
Sinuses, accessory nasal, irrigation of ----	10.00
Turbinate bone, galvano-cauterization of --	10.00
Turbinectomy -----	35.00
Fracture malar bone, depressed open reduction -----	100.00
Simple fracture -----	25.00

#### **SURGICAL—OPHTHALMOLOGICAL:**

Corneal ulcer, cauterization and curettage -	10.00
Corneal transplant -----	150.00
Ectropion, operation for -----	50.00
Entropion, cautery puncture or Snelling sutures -----	15.00
Enucleation of eye, simple -----	75.00
Needling or desiccation of cataract -----	75.00
Cataract extraction -----	200.00
Enucleation of eye with implantation for restoration of orbit -----	150.00
Evisceration of eye -----	75.00
Foreign body, removal from conjunctiva -----	10.00
Foreign body, removal from cornea, simple -----	10.00
Foreign body, removal from cornea requiring dissection or curettage -----	15.00
Foreign body, intraocular, removal with or without magnet -----	150.00
Glaucoma, corneal paracentesis for -----	50.00
Glaucoma, operations of all types for attempted permanent cure -----	150.00
Hordeolum, operation for -----	5.00



Iridectomy, non-glaucomatous -----	100.00	ulna, spine, pelvis) -----	150.00
Laceration, of lid, suture of -----	25.00	Osteomyelitis of skull, excision of -----	150.00
Laceration of globe, suture of -----	50.00	Paracentesis, joint, therapeutic (joints, bursa, ganglion cysts, tendons and tendon sheaths) -----	10.00
Lacrimal duct, dilation of -----	7.50	Sequestrum, removal of (deep) -----	150.00
Lacrimal sac, excision of -----	75.00	Sequestrum, removal of (superficial) -----	50.00
Lacrimal sac, dacryocystorhinostomy -----	100.00	Tenorrhaphy, extensor, first -----	50.00
Orbit, reconstruction of -----	150.00	each additional -----	25.00
Ptosis, operation for -----	100.00	Tenorrhaphy, flexor, first -----	75.00
Retina, detached, operation for -----	250.00	each additional -----	35.00
Strabismus, operation for -----	100.00	Tenotomy, closed -----	25.00
<b>SURGERY—THORACIC:</b>		Torticollis, spasmodic operation for -----	125.00
Decortication for chronic empyema -----	150.00	Vertebral fusion -----	250.00
Decortication for hemothorax -----	100.00	<b>Fractures and Dislocations:</b>	
Esophagogastrostomy -----	200.00	NOTE: The fees stated for fractures and dislocations include reduction, fixation and fourteen days' postoperative care but are exclusive of hospital charges, anesthetist's and X-ray fees. (See note at beginning of IN-PATIENT SERVICES of this fee schedule.) Fees for visits after fourteen days' completed postoperative care will be the applicable ones of those listed as hospital, home or office visits under OUT-PATIENT SERVICES of this fee schedule.	
Esophagus, resection of -----	200.00	Plaster casts applied or reapplied for fractures or dislocations during the period covered by the fourteen days' after-care are considered a part of the treatment and no additional fees for application of cast for these conditions will be authorized. The fee for application or reapplication of plaster casts after fourteen days' completed postoperative care will be as listed under casts listed herein under SURGERY-ORTHOPEDIC. One hundred per cent of these items will be charged only when disability other than fracture or dislocation is being treated.	
Foreign body, removal from lungs -----	150.00	The cost of plaster of Paris used for casts in contract or private hospitals will be listed as a part of the hospital charges.	
Foreign body, removal from heart -----	250.00	Compound fractures. The fee for care of compound fracture is that for care of simple fracture plus fifty per cent, except when otherwise specified.	
Gastrectomy, transthoracic -----	250.00	Open operation for fracture or dislocation. The fee for open operation when this procedure is necessary for reduction and fixation of a fracture or dislocation is that for care of simple fracture or dislocation plus fifty per cent, except when differently specified.	
Lobectomy -----	250.00	Multiple fractures. When more than one bone is fractured, the fee will be that for the major fracture plus fifty per cent of the fee listed for each other fracture, except when otherwise specified.	
Mediastinotomy -----	200.00	Fracture involving dislocation. When a fracture involves dislocation, the fee will be that for the fracture plus fifty per cent of the fee for treatment of the dislocation.	
Pericardotomy (open drainage of pericardium) -----	150.00	<b>SURGERY—ORTHOPEDIC</b> (Compound and Simple	
Pneumonectomy -----	250.00	Simple Compound	
Pneumonotomy -----	150.00	Carpal bone, one -----	\$ 35.00 \$ 50.00
Scalenotomy -----	75.00	Carpal bone, open reduction --	75.00
Subphrenic abscess, drainage -----	150.00	Carpal bones, each additional --	7.50 10.00
Thoracoscopy, cutting pleural adhesions --	75.00	Clavicle -----	50.00 75.00
Thoracoplasty, each stage -----	75.00	Clavicle, open reduction -----	100.00
Thoracoplasty, Schede operation -----	150.00	Coccyx -----	10-50 15-75
Thoracostomy, without rib resection -----	35.00	Femur -----	125.00 200.00
Thoracostomy, with rib resection -----	50.00	Open reduction -----	200.00
Thoracostomy, exploratory -----	150.00	Fibula -----	35.00 52.50
<b>SURGICAL—UROLOGICAL:</b>		Open reduction -----	52.50
Cystotomy, suprapubic -----	125.00	Finger, one -----	25.00 50.00
Epididymectomy -----	75.00	Fingers, each additional -----	10.00 15.00
Hydrocele, aspiration of -----	10.00	Humerus -----	75.00 100.00
Hydrocele, operation for -----	75.00	Humerus, open reduction -----	150.00
Litholapaxy -----	75.00	Metacarsal bone, one -----	35.00 50.00
Nephrectomy -----	200.00	Metacarpal bone, open reduction -----	75.00
Nephrotomy -----	175.00	Metacarpal bones, each addi-	
Orchidectomy -----	75.00	Metatarsal bone, one -----	35.00 50.00
Pyelotomy with removal of calculus -----	175.00		
Ureteral stone, removal of (non-operative) --	50.00		
Uretero intestinal anastomosis, unilateral --	150.00		
Uretero-intestinal anastomosis, bilateral, one stage -----	250.00		
Urethral fistula, operation for -----	75.00		
Urethrotomy, external -----	75.00		
Urethrotomy, internal -----	50.00		
Varicocele, operation for -----	75.00		
<b>SURGERY—ORTHOPEDIC:</b>			
Arthroplasty, major joint -----	250.00		
Body cast -----	50.00		
Bi-lateral hip spica -----	50.00		
Long leg cast -----	25.00		
Short leg cast -----	10.00		
Walking cast -----	15.00		
Long arm cast -----	15.00		
Short arm cast -----	10.00		
Shoulder spica -----	35.00		
Bone graft (long bone), including plaster cast -----	250.00		
Bone plate, removal of nails or screws -----	65.00		
Bone tumor, extensive, removal of -----	150.00		
Bone tumor, small removal of -----	50.00		
Osteochondritis dissecans (loose bodies) --	150.00		
Cartilage, semilunar, removal from joint --	150.00		
Claw foot, operation for -----	100.00		
Coccyx, excision of -----	75.00		
Hallux valgus, unilateral, operation of -----	100.00		
Hallux valgus, bilateral, operation for -----	150.00		
Hammer toe, operation for -----	50.00		
Osteomyelitis, operation for, small bones --	50.00		
Osteomyelitis, operation for, large bones (tibia, fibula, femur, humerus, radius,			



*New wide-use dosage form*

*of the outstanding  
anticholinergic-antispasmodic*

# PRO-BANTHINE<sup>®</sup>

## TABLETS

### (HALF STRENGTH)

Pro-Banthine (Half Strength) has been especially designed for your prescribing convenience.

This new form provides flexibility of dosage from low levels of one tablet t.i.d. for patients with minimal distress, to one or two tablets every 2 or 3 hours for those with more pronounced symptoms.

Primary indications are gastrointestinal spasm, bladder spasm, maintenance therapy of peptic ulcer and "irritable bowel" syndrome. The lower dosage also has a field of usefulness in smooth muscle spasm of children and geriatric patients.

*when your prescription reads—  
Rx Pro-Banthine Tablets (Half Strength)  
—the pharmacist will dispense this new size (7½ mg.)*

**PRO-BANTHINE** (*brand of propantheline bromide*)

**Dosage forms:**

Pro-Banthine tablets (15 mg.)  
Pro-Banthine tablets (Half Strength) (7½ mg.)  
Pro-Banthine ampuls (30 mg.)

G. D. Searle & Co., Chicago 80, Ill. *Research in the Service of Medicine.*

Metatarsal bones, each additional	10.00	15.00	Metacarpal, one	75.00
Metatarsal bones, open reduction		75.00	Metacarpals, each additional	15.00
Patella	50.00	75.00	Finger, one	50.00
Patella, open reduction or excision	150.00	150.00	Fingers, each additional	15.00
Pelvis	100.00	112.50	Hindquarter amputation (interinomino-abdominal amputation)	300.00
Radius, or ulna, or both, including Colles' fracture	65.00	75.00	Disarticulation at hip	200.00
Radius, or ulna, or both, including Colles' fracture			Thigh	150.00
Open reduction		150.00	Leg	150.00
Rib, one	15.00		Foot	150.00
Ribs, each additional	5.00		Metatarsal, one	75.00
Saerum	50.00	75.00	Metatarsals, each additional	15.00
Scapula	30.00	45.00	Toe, one	50.00
Sternum	50.00	75.00	Toes, each additional	15.00
Mandible, wiring or open reduction		100.00	<b>ANESTHESIA:</b>	
Mandible, simple reduction		50.00	First hour or fraction thereof	20.00
Hip nailing or pinning including prosthesis		250.00	Each additional hour or fraction thereof	10.00
Os calcis, elosed		50.00	First hour or fraction thereof, when administered by an M. D. anesthesiologist	25.00
Os calcis, open reduction		100.00	Each additional hour or fraction thereof	15.00
Os calcis, graft		150.00	<b>PHYSICAL THERAPY:</b> This is to be included in \$4.00 office visits.	
Tarsal bone, one	50.00	75.00	<b>MISCELLANEOUS MEDICAL TREATMENT:</b>	
Tarsal bone, each additional	10.00	10.00	Any drug, material or appliance furnished other than those usually used in treating a patient may be charged extra in accordance with prevailing prices in the community where treatment is given.	
Tibia, including medial malleolus	75.00	112.50	<b>FEES FOR MEDICAL TESTIMONY:</b>	
Tibia, open reduction		150.00	Appearance at the place of hearing, with or without testimony	35.00
Tibia and fibula	125.00	150.00	Each additional hour or fraction thereof	35.00
Tibia and fibula, open reduction		150.00	Testimony by deposition	25.00
Toe, one	25.00	37.50	<b>ROENTGENOLOGY WITH INTERPRETATION:</b>	
Toes, each additional	5.00	7.50	General	
Vertebrae, body of		150.00	NOTE: Preparation of the patient for radiography in procedures requiring barium meals or enemas, intravenous injections (as in the Graham technique for gall bladder or intravenous pyelography), will be included by the radiologist as a part of the service for the fees listed below. In arteriography, phlebography, bronchography, myelography, pneumoencephalography, ventriculography, and retrograde pyelography, the fees listed below are for X-ray only; the fees for preparation for X-ray in these procedures are listed under EXAMINATIONS-SPECIAL and SURGERY. The total fee for retrograde pyelography is cystoscopy with ureteral catheterization plus the X-ray fee shown below.	
Vertebra, transverse process only		50.00	Procedures	
<b>SURGERY—ORTHOPEDIC (Dislocations)</b>			Recommended Fee	
Carpal bone, one		50.00	Ankle	10.00
Carpal bones, each additional		10.00	Arm	10.00
Clavicle		50.00	Barium enema	20.00
Elbow, open reduction		125.00	Chest	10.00
Finger, one		10.00	Elbow	10.00
Fingers, each additional		5.00	Esophagus	15.00
Hip		100.00	Femur	10.00
Knee		100.00	Finger or toe	5.00
Mandible		15.00	Foot	10.00
Metacarpal bone, one		50.00	G. I. series	25.00
Metacarpal bones, each additional		5.00	G. B. series	15.00
Metatarsal bone, one		50.00	G. B. and G. I. series	40.00
Metatarsal bones, each additional		5.00	G. B. and G. I. and barium enema	60.00
Patella		50.00	Barium enema and G. I. series	45.00
Pelvis		75.00	Hand	10.00
Rib		25.00	Hip	12.00
Shoulder, closed reduction		50.00	Humerus	10.00
Shoulder, correcting operation		175.00	Jaw	15.00
Tarsal bones, one		75.00	Knee	10.00
Tarsal bones, each additional		10.00	Leg	10.00
Thumb		25.00	Mastoids	15.00
Toe, one, open reduction		50.00	Nose	15.00
Toes, each additional		15.00	Os Calcis	10.00
Vertebrae, one or more		100.00	Pelvis	10.00
<b>SURGERY—ORTHOPEDIC (Joint resections or Arthrodeses)</b>			Shoulder	12.00
Ankle joint		150.00	Sinuses	15.00
Elbow joint		150.00		
Hip joint		250.00		
Knee joint		150.00		
Shoulder joint		150.00		
Wrist joint		150.00		
Triple Arthrodeses		150.00		
<b>SURGERY—ORTHOPEDIC (Amputations)</b>				
Forequarter amputation (interseapulothoracic amputation)		300.00		
Disarticulation at shoulder		200.00		
Arm		150.00		
Forearm		150.00		
Hand		150.00		

Skull -----	20.00	Bronchogram -----	25.00
Spine:		I.V.-Cholangiogram -----	25.00
Cervical -----	15.00	T. Tube-Cholangiogram -----	20.00
Dorsal -----	15.00	Encephalogram -----	30.00
Lumbar -----	15.00	Chest-Fluoroscopy -----	5.00
Sacrum -----	15.00	Hip Nailing -----	30.00
Coccyx -----	15.00	Hysterosalpingogram -----	15.00
Sternum -----	15.00	Long Bones -----	10.00
Urinary Tract-IVP -----	25.00	Myelogram -----	25.00
Cysto -----	15.00	Pelvimetry -----	15.00
Wrist -----	10.00	Placenta -----	15.00
Abdominal-Aortogram -----	25.00	Venogram -----	25.00
Cardiac-Angiogram -----	30.00	Ventriculogram -----	25.00
Cerebral-Arteriogram -----	25.00	Planigram -----	25.00

(To Be Continued in September)



## THE MYO-CERVICAL COLLAR



Adjustable as to Height, Degree of Hyperextension, and for Cases of Torticollis, and for Whip-cord Injuries of the Neck, Arthritic Necks, Wry Necks, or to Generally Support, Stabilize, Immobilize, or to Hyperextend the Neck in Cases Where Rigid Cast or Bracing Is Not Indicated.

Lower Perimeter Adjusts Automatically to Contour of Sternum and Clavicle.

Light, Cool, Comfortable, and Washable.

Positive Support.

Sizes: Large — Medium — Small

Give Neck Size When Ordering



# W i n c h e s t e r

CAROLINAS HOUSE OF SERVICE



**Winchester Surgical Supply Co.**  
119 East 7th St. Tel. 2-4109 Charlotte, N.C.

**Winchester-Ritch Surgical Co.**  
421 W. Smith St. Tel. 5656 Greensboro, N.C.



relief from all  
cold symptoms  
**Tussagesic®**

*decongestant,  
non-narcotic antitussive,  
analgetic, expectorant*

*Each timed-release tablet provides:*

Triaminic® .....	50 mg.
(phenylpropanolamine HCl).....	25 mg.
pheniramine maleate .....	12.5 mg.
pyrilamine maleate .....	12.5 mg.
Dormethan (brand of dextromethorphan HBr) .....	30 mg.
Terpin hydrate .....	180 mg.
APAP (N-acetyl-p-aminophenol) .....	325 mg.

*Dosage:* One Tussagesic tablet in the morning,  
mid-afternoon and evening, if needed.

Also, for patients who prefer liquid medication:  
TUSSAGESIC SUSPENSION.

SMITH-DORSEY • Lincoln, Nebraska  
a division of The Wander Company

**ESTES SURGICAL  
SUPPLY COMPANY**

Phone WALnut 1700-1701

56 Auburn Avenue

ATLANTA, GA.

**ADVERTISERS**

Abbott Laboratories  
Ames Company  
Appalachian Hall  
Brawner's Sanitarium  
Burroughs-Wellcome & Co.  
Charles C. Haskell Co.  
Coca-Cola Company, The  
Davies, Rose & Co., Ltd.  
Drug Specialties  
Eli Lilly & Company  
Estes Surgical Supply Co.  
General Electric Company  
Highland Hospital  
Irwin, Neisler & Co.  
Jones & Vaughan, Inc.  
Kent Cigarettes  
Lederle Laboratories  
Mayrand, Inc.  
Merch, Sharp & Dohme  
Parke, Davis & Company  
Pfizer Laboratories  
Physicians Casualty Company  
Physicians Products Co.  
Pinebluff Sanitarium  
Professional Management South  
Purdue Frederick Co.  
Riker Laboratories, Inc.  
A. H. Robins Co., Inc.  
J. B. Roerig & Co.  
Sandoz Pharmaceuticals  
Schering Corporation  
Sealy of the Carolinas  
G. D. Searle & Co.  
Smith-Dorsey  
Smith, Kline, & French  
E. R. Squibb & Sons  
United States Brewers Foundation  
Wallace Laboratories  
Waverley Sanitarium, Inc.  
Westbrook Sanatorium  
Winchester Surgical Supply Co.  
Winthrop Laboratories, Inc.  
World Insurance Co.

**WAVERLEY SANITARIUM, INC.**

(FOUNDED IN 1914 BY DR. AND MRS. J. W. BABCOCK)

HOSPITAL CARE AND TREATMENT OF NERVOUS AND MENTAL DISORDERS  
ADMISSIONS LIMITED TO WHITE WOMEN  
SPECIALIZING IN SHOCK THERAPY

INCLUDES OUT-PATIENT DEPARTMENT FOR BOTH SEXES

DR. CHAPMAN J. MILLING, MEDICAL DIRECTOR

DR. JAMES B. GALLOWAY — DR. PENROD G. HEPPER

SENIOR ASSISTANT PHYSICIANS

FOR RESERVATION CALL  
SUPERINTENDENT 2-4273

2641 FOREST DRIVE  
COLUMBIA, S. C.

FIRE SPRINKLER SYSTEM THROUGHOUT HOSPITAL

# The Journal

of the

## South Carolina Medical Association

VOLUME LV

September, 1959

NUMBER 9

## ADVANCES IN CANCER CONTROL

DR. JOHN R. HELLER\*

I am delighted and honored to be invited to Columbia to join you at this fine meeting. As a native, born and raised across the State in Oconee County, I always look forward with great pleasure to returning to South Carolina and seeing old friends.

May I say, too, that I am very gratified with the progress we are making against cancer, and that I am grateful for the opportunity to discuss cancer control with you.

Until a cure for cancer is found, our greatest challenge is to discover the disease early or prevent it, whenever possible. The elements which comprise this accomplishment are what we mean by control.

Control motivates research. The demand for better means of control inspires accelerated research, and in turn, as the means are forthcoming, control translates them into clinical application. Research and control are interdependent, in fact we might say that research is the common denominator of all control activities.

The importance of controlling cancer by every possible means is indicated by the fact that an estimated 450,000 new cases of cancer are diagnosed in this country every year. About 150,000 of these will be saved this year. Yet, some 260,000 Americans will die of the disease, 75,000 of whom could be saved by earlier and better treatment.

### *Education*

The first step in the control of cancer is to

stimulate the individual to awareness of cancer's danger signals and to impart to him something of the nature of the disease. Through cancer education, the individual is motivated to seek medical attention at the earliest possible moment. I think that the American public is becoming extremely well informed on the subject of cancer, and I believe that our lay education programs have eliminated much of the fear which veiled the disease in the past. Public education is, then, a prerequisite of cancer control, because doctor and patient must be brought together as early as possible if effective treatment is to be accomplished. When the patient consults his physician, he has started the all-important compression of time between critical intervals in the disease. These intervals, beginning with theoretical recognition of cancer by the patient or discovery by the physician and ending with completion of rehabilitation, must be reduced to an absolute minimum if cancer is to be controlled.

One of the aims of cancer control, of course, is to help close the gap between the production of new knowledge obtained through cancer research and its utilization by the physician. Toward this end, the National Cancer Institute has programs of both formal and informal education for physicians. For example, the Institute makes annual grants of funds for cancer teaching to 85 medical, 45 dental, and 6 osteopathic schools. This program has been in operation over 10 years, and it is now possible to take a long-range view of its effect. There is every evidence that the program has developed an awareness of can-

\*Director, National Cancer Institute, National Institutes of Health, Public Health Service, Department of Health, Education, and Welfare, Bethesda, Maryland. Presented at the South Carolina Medical Association, Columbia, South Carolina, May 13, 1959.

cer among students, improved the medical services to cancer patients through the establishment of new and additional clinics, stimulated student interest in cancer research or control, and increased clinical instruction in cancer.

The Institute also provides clinical traineeships for young physicians who wish to specialize in the detection, diagnosis, and treatment of cancer. A recent survey made among physicians who received support under this program indicated that at least half were devoting 50 to 100 percent of their time to cancer work; 49 percent were engaged in cancer teaching; and 72 percent were serving on staffs of cancer clinics or detection centers. This program, it would seem, has been very helpful in partially meeting the need for physicians trained in the various specialties vitally important to adequate management of the cancer case.

Informal education for the medical profession is best accomplished by making the latest information on cancer detection, diagnosis, and treatment available through such media as publications, films, exhibits, refresher courses and cancer conferences.

Attesting to the effectiveness of both lay and professional cancer education is the fact that today we are saving one in every three patients who has cancer. Twenty years ago, only one in four survived five years after diagnosis. With earlier effective treatment, however, it is believed that we could save one out of two of those who get cancer today.

#### *Cancer Facilities and Services*

The organization of cancer clinics has contributed greatly to the control of cancer. Such clinics, usually operated in a general hospital, provide an environment in which representatives of the various specialties concerned with cancer, such as surgery, pathology, and radiology, can work with the physician in arriving at an accurate diagnosis and effective treatment. The number of cancer clinics has increased markedly in recent years and there are now more than 650 which have been approved by the American College of Surgeons as the result of inspections for which the National Cancer Institute and the American

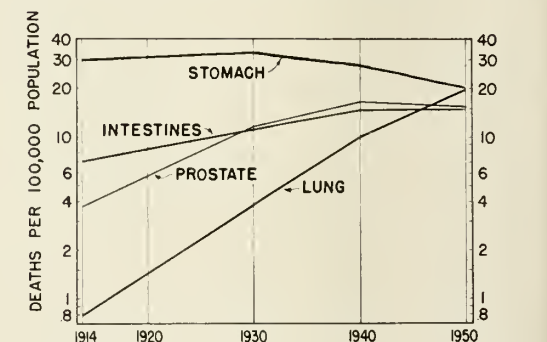
Cancer Society have provided financial assistance.

The National Cancer Institute supports cancer clinics, tissue diagnostic laboratories, tumor registries, and other related services through grants to the States. The funds may be used for a variety of purposes which aid the physician as well as the cancer patient. All of the official State agencies now have cancer control programs.

#### *Epidemiology*

Another important component of cancer control is epidemiology, which provides us with much knowledge on the prevalence, incidence, distribution, and mortality of the disease, and gives us a realistic look at cancer in the human population.

#### **CANCER DEATH RATES FOR SELECTED SITES WHITE MALES - 1914-1950**



NOTE: Adjusted for age on total population of the U.S.—1950  
NCI-3-54

The immediate objective of cancer epidemiology is to describe group characteristics associated with cancer, and, of equal importance, group characteristics associated with its absence. What characteristics—constitutional and environmental—do cancer patients have in common? What characteristics, if any, do cancer-free persons have in common? Are there ascertainable differences between these two sets of characteristics? By analyzing available data—morbidity and mortality records, case histories, and clinical observations in medical literature—and by special surveys to collect data not otherwise available, epidemiology attempts to answer these questions. I should like to mention briefly a few observations relating to this important area.

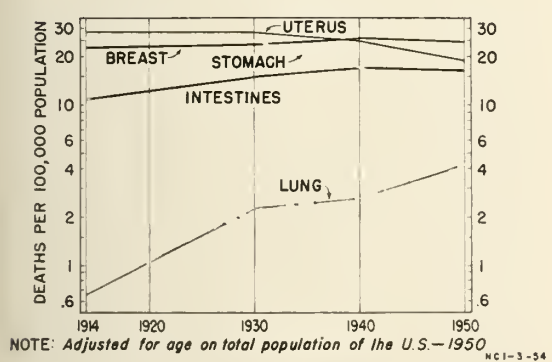
In New York City, when the incidence of



cancer of the uterus was compared among different population groups, it was found that cancer of the uterine cervix occurs three to four times as frequently in non-Jewish white women as in Jewish women of either that city or Israel.<sup>1</sup> We have found, too, in other studies, that cancer of the uterine cervix is relatively higher among women of the lower income classes, while breast cancer occurs somewhat more frequently in the higher income groups.<sup>2</sup>

For the past several years we have been studying some 3,000 uranium miners on the Colorado Plateau. Our field medical teams have examined the miners, and our studies will continue so that we can determine

CANCER DEATH RATES FOR SELECTED SITES  
WHITE FEMALES - 1914-1950



whether this group has a greater risk of getting cancer than the rest of the population and whether control measures are needed.

A study of leukemia showed a downward trend since 1940 in the rate of increase of mortality from the disease in the United States.<sup>3</sup> This may indicate that whatever causes leukemia is occurring less than we feared, which is indeed heartening news.

From these few examples, it is clear that epidemiology is the key to much of what we are seeking in the control or prevention of cancer. While we do not know the explanation for these phenomena, the observations may provide leads which will help explain variations in the incidence of different cancers among different segments of the population.

Prevention

Today it is known that a number of cancers

are initiated by exposure to various environmental or exogenous agents, usually over an extended period of time. Extensive laboratory and epidemiological studies have shown that many kinds of cancer induced by exposure to industrial and other environmental agents can be prevented by protecting people from radiations, chemicals, air pollutants, and other substances or conditions which can induce cancer. These studies have also shown that there is a latent period before specific cancers appear and that this is related to the degree and duration of exposure to a carcinogenic agent.

The subject of prevention, of course, brings to mind the question of lung cancer etiology and the relation of smoking to the steadily rising death rate from the disease. The position taken by the Public Health Service and the American Cancer Society is that excessive cigarette smoking is a factor in lung cancer causation, although not the only one. We believe that more research is needed to identify, isolate, and eliminate the precise factors in cigarette smoking which can cause lung cancer in man. More research into other probable causes of lung cancer, including air pollution is essential, too, in resolving this problem.

In a recent study made by the National Institutes of Health in cooperation with the Veterans Administration the mortality ratio for regular cigarette smokers was found to be about 10 times that for non-smokers.<sup>4</sup> This study is continuing and will explore possible statistical relationships between death rates and such environmental factors as occupations, work environments, and characteristics of the communities in which the persons lived.

Some occupational groups are known to have substantially increased lung cancer risk, for instance, workers in the chromate industry. Our scientists are conducting studies to identify the agent or factor that causes lung cancer among this group. About a year ago, they reported that dusts of crude chromite might accumulate in the lungs in a biologically inactive state. The dust, then, might be acted upon by body chemicals, causing the slow release of an active form of chromium. It has now been found that, in experiments with implants of chromium ore roast in rats, the roast

contains chromium in a form that exerts a sufficiently strong and prolonged effect upon exposed tissue to cause cancer.<sup>5</sup>

Another cancer study which promises to provide much information on environmental cancer is under way in Washington County, Maryland, an area in which about 85 percent of the residents spend their entire lives. Here, we are attempting to make a comprehensive survey of the possible role of environmental factors in cancer causation. Such diverse factors as type of dwelling; type of soil, water, and air; background radiation and family history are being analyzed to provide leads on the influence of environment on cancer incidence. Although it is too early to establish any major findings, accumulated evidence supports the concept that differences in cancer mortality do exist between residents in different geographical areas of the county. The study should certainly contribute significantly new and useful knowledge on the etiology and prevention of cancer.

#### *Diagnostic Tests*

One of the greatest problems of cancer control, as you are well aware, is how to find the cancer case early enough for effective cancer treatment. It is recognized that there is no method available today other than general periodic physical examinations which holds promise of discovering early cancer of all types. Periodic examinations do provide the opportunity for discovering a sizable number of early lesions, since more than one-half of all cancers occur at sites accessible to direct examination. But if our present knowledge is to have completely effective application in the control of cancer, we must have a practicable case-finding method.

After long and careful consideration of the approaches to the development of new diagnostic procedures, I am happy to tell you that we have launched a new, intensive program of research aimed at providing better means of detecting cancer in its earliest stages. It is our sincere hope that this program will eventually produce a test or battery of tests to detect early cancer.

In the creation of this program, we sought the advice and consultation of committees of scientists from such fields as biology, bio-

chemistry, endocrinology, pathology, tissue culture, radiology and electronics. Their recommendations constitute, we believe, sound lines for the direction of the program.

The approach to this problem is necessarily broad in scope, because of the many scientific disciplines that must be employed. We anticipate that the research will proceed along four major lines: (1) the measurement of some product of malignant growth; (2) the measurement of some bodily change produced by cancer; (3) the measurement of some change in the body that favors the development of cancer; and (4) the development of instruments that may facilitate the identification of cancer by mechanical, physical, electronic, or other means.

Research will be carried out under grants, contract, and direct operations. The first two contracts for research in the program were awarded just last month. These are concerned with the distribution of enzymes and other biochemical components in the blood serum of cancer patients and normal persons.

Although a general diagnostic test for cancer has yet to be found, some development in recent years in diagnostic tools are aiding in the diagnosis of cancer of specific sites. One of these, the cytological method developed by Papanicolaou and Traut for the discovery of early uterine cancer, is proving to be a useful diagnostic aid. For more than 10 years, the National Cancer Institute has studied the method intensively, and the efficacy of the test is one of the most important dividends we have realized from our research investment.<sup>6</sup> Every year about 16,000 women die of uterine cancer. We believe that these deaths can now be practically eliminated by the widespread use of the cytologic test for uterine cancer. This means that virtually all of the 60,000 women in this country estimated to have undiscovered asymptomatic cases of invasive cervical cancer can be saved by early diagnosis and adequate treatment.

To speed the examination of specimens obtained in the cytologic test for uterine cancer, our scientists are developing and improving the accuracy of an electronic device called the cytoanalyzer. This instrument, designed to detect abnormal cells by the microscopic ex-

amination of slides, has been found capable of accurately selecting a significant percentage of specimens that do not need further examination by cytotechnicians or pathologists.<sup>7</sup> Coupled with advances in the cytologic technique for cancer detection, the cytoanalyzer will no doubt provide a powerful weapon for cancer control.

Variations of the cytologic method to aid in the diagnosis of cancer of other sites, such as the lung, large bowel, and stomach, are being investigated. Recently a group of scientists at the University of Chicago reported that the exfoliative cytologic technique is an effective aid in the diagnosis of cancer of the digestive tract. In 1,561 suspected cancer patients studied for 3 years, the cytologic test accurately detected 95 percent of cancer of the esophagus, stomach, and colon, and 60 percent of cancers of the pancreatic and biliary systems.<sup>8</sup>

Study of cancer cells in the blood is an important area of research in cytology. In the past, the presence of cancer cells in the circulating peripheral blood has been demonstrated but thought to be extremely rare. Recently, however, scientists have reported that many patients with known cancer do have recognizable tumor cells in their blood. The study was made possible by a technique developed at the National Cancer Institute for preparing human whole blood so that tumor cells are not destroyed. In 100 cancer patients studied, cytologically malignant cells were identified in 39 percent, and suspicious cells were present in an additional 12 percent. Cells that were considered to be cytologically malignant were found in only 1, or 0.5 percent, of the control group of 200 persons.<sup>9</sup> Continuing research will be directed at ascertaining the significance of circulating tumor cells in individual patients affected with various types of cancer.

### *Immunology*

The discovery of an effective vaccine against poliomyelitis brought hope that such a measure will one day become available against cancer. Although there has been no cause and effect relationship demonstrated between viruses and human cancers, many prominent virologists believe that there is reason to consider viruses as

responsible for the induction of some types of human cancers.

The reasons for this belief have been strengthened by recent research on viruses in animals. Permit me to cite several of these developments which I believe are significant.

At the National Institutes of Health, two women scientists observed production of multiple tumors in animals by an agent now known to be a virus. This agent, called the SE-polyoma virus, is remarkable in that it crosses strain and species barriers in producing tumors. The scientists have also reported an immunization procedure that is 97 per cent effective in preventing the growth of polyoma virus-induced tumors in hamsters.<sup>10</sup>

In a grant-supported study, a form of leukemia was induced in mice within two or three weeks following inoculation of a filterable agent.<sup>11</sup> This scientist also has developed a formalin-killed vaccine that protects the mice from developing the disease when they are challenged with live virus.<sup>12</sup>

Research on viruses has been aided by work with the electron microscope. By means of this instrument, scientists have seen virus-like particles in tumor tissues of animals as well as in biopsy material from an enlarged cervical lymph node of a patient with acute lymphatic leukemia.<sup>13</sup>

Research in the virus area is being expanded both in our laboratories and through our grants program. There are many questions concerning the complexities of virus-cancer research, the answers to which will come only from arduous, intensive, and often frustrating work in many laboratories.

### *Treatment*

Surgery and radiation still remain the treatments of choice for localized and accessible cancers. Against disseminated cancers, however, chemotherapy holds the most promise.

Extensive surgery has been made more practical by better preoperative and postoperative management of the patient, including safer use of blood transfusions, use of antibiotics to control infections, and better anesthesia. One of the problems in surgery, of course, is local tumor recurrence. Breast cancer has an especially high incidence of recurrence. Some investigators report that



mastectomy fails in 20 to 30 percent of cases because of wound recurrences.<sup>14</sup> For this reason, research is under way to accomplish effective local chemotherapy to destroy cancer cells in the blood or lymph channels at the time of original surgery.

The cancer patient who receives radiation therapy today benefits from a variety of improvements in instrumentation and techniques which permit improved measurement of radiation dosage. These include the development of new supervoltage machines for the treatment of deep-seated cancers. The advantages to be gained from these new machines is that their rays can be confined to the area of the tumor more effectively, thus irradiating a smaller zone of normal tissue. This is sometimes achieved by rotating the patient so that the tumor site receives a maximum and normal tissue a minimum dose. Drugs are also being developed to reduce the deleterious effects of irradiation upon the patient.

Chemotherapy continues to be the most active area of research in the treatment of cancer. Now used chiefly as a palliative partner to surgery and radiation, chemotherapy promises to give the physician more effective drugs which will perhaps seek out and destroy disseminated cancer. Although a drug has never cured a human cancer, there are about 20 anticancer drugs now in use which are temporarily effective in keeping some 30 forms of the disease under control.

Under the national cancer chemotherapy program, about 40,000 materials a year enter an anticancer testing program. About 400-600 of these "pass" this initial screening and are studied further, but more than 90 percent are rejected because of some undesirable effect. Eventually only about 1 out of 1,000 materials originally entering the screening program is placed in clinical trials in approximately 150 cooperating hospitals throughout the country. Now more than 70 drugs are being studied against a variety of malignancies, including the leukemias, cancer of the breast, prostate, lung, rectum, colon, ovary, skin and bone. These drugs are being tested alone in comparison with other agents and as adjuncts to other forms of therapy, particularly surgery. We can hope, in fact, for the time when the

physician will have at his command a number of chemical compounds which he can use to treat and cure cancer.

The gains made in effective treatment are reflected in the trend in 5-year survival rates observed in a study made in Connecticut<sup>15</sup> of over 75,000 cases of cancer reported by hospitals during the 17-year period, 1935-1951. Survival rates for male patients increased from 19 percent for cases diagnosed 1935 through 1940 to 25 percent for cases diagnosed 1947 through 1951. For female patients, the corresponding figures are 29 and 38 percent. Surgery and radiation were the principal forms of therapy used.

I think that we can look back over the past decade with a sense of satisfaction at the tangible evidences of progress against cancer. The extensive, dynamic cancer control program now under way in this country depends upon the combined efforts of the research scientist, the medical practitioner, and a co-operative and well-informed public. The 800,000 Americans who are alive and free of cancer attest to the effectiveness of the control program.

The mobilization of resources against cancer is getting results, and we believe continued research will lead us to the ultimate control of cancer.

#### REFERENCES

- 1 Dunham, L., and Dorn, H. F.: Cancer of the uterus in New York City and Israel. Pres. Am. Pub. Health Assoc. meeting. Cleveland, Ohio, Nov. 12, 1957.
- 2 Dorn, H. F., and Cutler, S. J.: Morbidity from cancer in the United States. Public Health Monograph No. 56, Department of Health, Education, and Welfare, Public Health Service, Washington, D. C., U. S. Gov't Print. Office, 1959.
- 3 Gilliam, A. G., and Walter, W. A.: Trends of mortality from leukemia in the United States, 1921-55. Pub. Health Rep. 73:773, 1958.
- 4 Dorn, H. F.: Tobacco consumption and mortality from cancer and other disease. Pres. Seventh International Cancer Congress, London, July 8, 1958.
- 5 Hueper, W. C.: Experimental studies in metal carcinogenesis. X. Carcinogenic effects of chromite ore roast deposited in muscle tissue and pleural cavity of rats. A.M.A. Arch. Indust. Health. 18: 284, 1958.
- 6 Erickson, C. C., Bennett, E. E., Jr., Graves, L. M., Kaiser, R. F., Malmgren, R. A., Rube, L., Schreier, P. C., Cutler, S. J., and Sprunt, D. H.: Population screening for uterine cancer by vaginal cytology. J.A.M.A. 162:167, 1956.
- 7 Pruitt, J. C., Courtney, W. B., Kaiser, R. F., and Ingraham, S. C., II: Results of the first clinical trial of the cytoanalyzer. Pres. Inter-Society Cytol-

- ogy Council meeting, New York City, Nov. 14, 1958.
- 8 Raskin, H. F., Kirsner, J. B., Palmer, W. L.: Role of exfoliative cytology in the diagnosis of cancer of the digestive tract. *J.A.M.A.* 169:789, 1959.
  - 9 Pruitt, J. C., Hilberg, A. W., and Kaiser, R. F.: Malignant cells in peripheral blood. *New England J. Med.* 259:1161, 1958.
  - 10 Stewart, S. E., and Eddy, B. E.: Tumor induction by polyoma virus and the inhibition of tumors by specific neutralizing antibodies. *Pres. Am. Pub. Health Assoc.*, meeting, St. Louis, Missouri, Oct. 28, 1958.
  - 11 Friend, C.: Cell-free transmission in adult Swiss mice of a disease having the character of a leukemia. *J. Exper. Med.* 105:307, 1957.
  - 12 Friend, C.: Immunological studies on a filterable agent causing a leukemia-like disease in mice. (Abstract.) *Proc. Am. A. Cancer Res.* 2:204, 1957.
  - 13 Dmochowski, L., and Grev, C. E.: Studies on sub-microscopic structure of leukemias of known or suspected viral origin: A review. *Blood* 13:1017, 1958.
  - 14 Smith, R. R., and Hilberg, A. H.: Cancer-cell seeding of operative wounds as a cause of failure in the surgical treatment of cancer. *J. Maine M. A.* 48:151, 1957.
  - 15 Griswold, M. H., Wilder, C. S., Cutler, S. J., Pollock, E. S.: *Cancer in Connecticut, 1935-1951.* Connecticut State Dept. of Health, 1955.

# ORAL ELECTROLYTE THERAPY FOR DIARRHEA

## A CLINICAL STUDY OF 65 PATIENTS WITH MILD DIARRHEA AND DEHYDRATION\*

J. G. HOLLOWELL, M. D. AND J. R. PAUL, JR., M. D.

### Introduction

Although it is recognized that oral electrolyte solutions should not be relied upon heavily for the routine treatment of acute diarrhea in all infants, it is felt that such medications may provide helpful adjuvant therapy in the management of certain mild cases, particularly those not needing hospitalization. The advantages of a solution with known electrolyte concentrations when compared with the "kitchen concocted diarrheal mixtures" are readily apparent. It was with this in mind that we used *Equlyte*\*\*, an oral poly-electrolyte solution containing kaolin, pectin, methylcelluloses and sucrose, in the treatment of 103 ambulatory or out-patients with diarrhea seen in the clinic or emergency room of the Medical Center Hospitals.

### Method

1. One-hundred and five patients with acute diarrhea of mild to moderate severity and mild

dehydration were selected for treatment with *Equlyte*. These patients were given *Equlyte* for 24 to 48 hours using the dosage recommended, i. e.

Weight of Patient	Amount of <i>Equlyte</i> Given
10 lb.	10 ml. t.i.d.
20 lb.	15 ml. q.i.d.
30 lb.	50 ml. t.i.d.
40 lb.	50 ml. q.i.d.
over 40 lb.	50 ml. q.4.h.

An additional dose was given after each diarrheal stool.

2. Water to cover that lost in the stools, the daily maintenance, and the additional amount lost in the face of hyperpnea and hyperpyrexia was encouraged. Additional calories were given, such as cola drinks. The electrolyte solution was added to water and given in bottles to infants less than six months of age, since it was felt that the thirst mechanism in these infants might be depressed.

3. During the acute period of diarrhea milk and other foods were withheld, the patients receiving only the water, electrolyte and carbohydrate solution.

4. When the diarrhea was associated with respiratory tract and other infections, antibiotics were administered.

\*This study was partly supported by a grant from Reid Laboratories and was conducted in the pediatric wards and clinic of the Medical Center Hospitals, Charleston, S. C.

\*\*The composition of *Equlyte* per 100 ml. is as follows: kaolin 14.3 gm.; pectin 1.4 gm.; methylcellulose 0.77 gm.; sucrose 35.7 gm.; sodium lactate 2.3 gm.; sodium chloride 0.68 gm.; potassium chloride 0.91 gm.; dipotassium phosphate 1.71 gm.; calcium lactate 0.51 gm.; magnesium sulfate 0.14; flavoring and preservatives. *Equlyte* was furnished through the courtesy of Reid Laboratories.

5. The stools were cultured for salmonella, shigella, and pathogenic *E. coli*; and when these organisms were found, the patients were treated accordingly.

While this study was in progress, patients who had severe and life-threatening diarrhea were admitted to the hospital and treated by standard methods with intravenous fluids. Equlyte was not used for these patients.

### *Results*

One-hundred and three patients from two weeks to fourteen years of age were given Equlyte. The majority were less than six months old. The sex distribution was about equal. All but six children of house officers were colored clinic patients. Of the 103 patients, 65 had adequate follow-up. (We are sure that the other 38 recovered.) Sixty-one infants and children promptly improved once treatment was begun. These patients showed improvement in general strength and behavior, decided decrease in the number of stools, improvement in the consistency of the stools, and definite increase in hydration and weight gain. The diaper rash which often accompanied the frequent watery diarrheal stools subsided soon after treatment was started.

Four patients in the series did not respond to the oral electrolyte regimen alone. One child had fecal incontinence secondary to spina bifida and former meningomyelocoele. One patient had symptomatic improvement as long as he received Equlyte but soon after its discontinuance the diarrhea returned. Later studies proved this patient to have amebiasis. Two infants aged one and three months respectively, after Equlyte was started initially, had to be admitted to the hospital, because of increasing severity of diarrhea and dehydration, for administration of intravenous fluids.

### *Discussion*

The oral electrolyte regimen using Equlyte for the treatment of diarrhea as outlined above provides a useful method of controlled balanced electrolyte administration to infants whose diarrhea can be managed on an outpatient basis. The benefits of this control, however, are directly proportional to the mother's ability to measure the medicine and carry out instructions properly. There is always a

tendency for parents, particularly in clinic clientele, to think that "if a little is good, more is better".

In the treatment of diarrhea one aims (1) to replace the deficit of fluid (water) and electrolytes lost in the stools, (2) to furnish the usual requirements of these substances, (3) supply sufficient calories to prevent excessive breakdown of body tissues, (4) replace, as necessary, concomitant losses of fluid and electrolytes in excess of the usual daily requirement during the period of treatment, and (5) provide a hypotonic balanced electrolyte solution so that the functioning kidney can correct specific electrolyte deficiencies, for instance, those seen in mild acidosis. It is important to remember that the composition of fluids and electrolytes lost from the body through the lungs with hyperventilation associated with mild acidosis or hyperpyrexia, through the skin when the environmental temperature is elevated, and in the stools is in the most instances hypotonic when compared with blood plasma. The kidneys alone are able to excrete fluid which is hypertonic when compared with body fluids. Acute diarrhea superimposed on the renal immaturity of most infants leads to marked impairment of kidney function (frequently with albuminuria), so that one must also supply sufficient additional water and calories to aid the overburdened and probably damaged kidney in the excretion of its solute load.<sup>3</sup> The occurrence of hypernatremia and hypertonic dehydration may be directly related to ignorance of these principles, and inadvertant administration of excessive electrolyte, particularly unbalanced electrolyte mixtures (as table salt and sugar, etc.).<sup>1</sup>

The value of kaolin, pectin, and methylcellulose in a regimen of oral electrolyte therapy is questionable. These substances act as bulk formers. They may absorb intraluminal toxins. It is noted in most of the patients studied that the symptomatic relief of the diarrhea was fairly prompt after the administration of Equlyte, and most striking was the subsidence of diaper rashes within two to three days after treatment was started. On the other hand, these substances do not of themselves decrease loss of water or electrolyte in the stools.<sup>2</sup>



One of the disadvantages of the Equlyte as of any oral electrolyte regimen is the lack of adequate water intake. This was partially alleviated in the infants still on the bottle by adding the Equlyte to water or a mixture of water and a "cola drink" or fruit juice, and feeding the mixture by nipple. In older infants and children the thirst mechanism and the encouragement of fluids by the parents had to be relied upon. As the symptoms subsided, a dilute milk formula is used for the vehicle of Equlyte administration. It was noted by some parents that Equlyte was not easily dissolved in water or dilute formula when this method of administration was desired. Other parents stated that the large dosage required for older children was not readily accepted.

#### Summary

1. Equlyte, an oral polyelectrolyte solution containing kaolin, pectin, methylcellulose, and sucrose was given to 103 infants and young children with mild to moderate diarrhea. Schedules of administration and dosage are given. The results of treatment in 65 who were followed up are described.

2. Equlyte contains balanced amounts of electrolyte. When it is used properly it supplies the needs of an infant with diarrhea for

these materials. The importance of giving sufficient additional water and also carbohydrate in the treatment of diarrhea with Equlyte is stressed.

3. The relative advantages and disadvantages of kaolin, pectin, and methylecellulose are discussed.

4. Equlyte as an oral electrolyte solution is a useful therapeutic aid in the treatment of diarrhea, but should be used only after careful clinical evaluation of the patient. It does not replace the parenteral administration of fluids when this route is indicated.

5. Too vigorous administration of Equlyte or any oral electrolyte solution may result in hypernatremia. This is a very serious condition which is more difficult to correct than ordinary hypotonic dehydration.

#### REFERENCES

1. Colle, E., Avoub, E., and Raile, R.: Hypertonic dehydration (hypernatremia): The role of feedings high in solutes. *Pediatrics* 22:5, 1958.
2. Walker, Major S. H.: Ineffectiveness of carob flour in infantile diarrhea. *A.M.A. Am. J. Dis. Child.* 84:309, 1952.
3. Darrow, D. C., Cooke, R. E., and Segar, W. E.: Water and electrolyte metabolism in infants fed cow's milk mixtures during heat stress. *Pediatrics* 14:602, 1954.
4. Brusilow, S. W. and Cooke, R. E.: Fluid therapy of diarrhea and vomiting. *Pediat. Clin. North America* 6:99, 1959.



# SOME CONSIDERATIONS OF RADIATION HAZARDS

EUGENE P. PENDERGRASS, M. D.\*

Modern civilization is confronted by many problems. Protection from the hazard of radiation is one that is receiving increasing attention.

The problem of protection from radiation dates back to the end of the 19th century. In the early days, following the discovery of x-rays and radium, many of the early pioneers not only produced irreversible damage to tissues of patients, but they themselves were injured. With the developments of the Coolidge tube there was observed an alarming increase in the so called "radiation burns". The harmful effects of these radiations were limited to the radiologists, the patients and the technicians. Up until 1925, x-rays and radium were used largely in the medical field; then industry began to use these agents on an increased scale. By 1940, the problem of radiation exposure was extended to include some of the fields of industrial and occupational health.

With the development of atomic energy, radioactive sources increased in quantity and variety and the distribution of these products became more widespread. For 17 years, we have been living in what is commonly called "the nuclear era". Today, our efforts are to control radiation so that the members of society can live safely in a new environment, one which the atomic industrial revolution and the development of nuclear weapons is creating. We are now confronted with a public health problem which includes radiation from all of the above sources.

The public is concerned about the potential dangers of radiation. There is scarcely a day that I am not called, either by patients or doctors, or by letters asking if it is safe to do this or that x-ray examination. Patients come in with lesions that should be treated by x-rays or some form of radiation and they are

very hesitant to subject themselves or their family to such procedures because of their fear and concern. This fear is not limited to the public. It has become manifest among physicians, engineers (especially electronic engineers), geneticists, scientists and other professionals.

It is quite likely that much of the material and scare headlines concerning radiation hazards published in newspapers, journals and books, and talks over the radio and television and speeches and writings of scientists have created concern and fear among many people. With Lamerton,<sup>1</sup> I am not convinced that the clinical and experimental data often quoted by those who are fearful justifies one in drawing a definite conclusion regarding the risk to the individual of small doses of radiation. Neither can I accept the estimates of leukemia and bone tumors described by some authors as likely to result from small doses of radiation. There are many other factors that should be evaluated before drawing such conclusions.

There are many in medical circles who criticize the unusual publicity. It is my opinion that this so called publicity may be a blessing in disguise and will result in making us as radiologists and physicians do a better job. If it does, a service to humanity will have been rendered.

It is the responsibility of the medical and allied professions to assist in trying to prevent unnecessary exposure to harmful radiation. Although the medical use of such modalities is not limited to those administered by radiologists, leadership for protection has been, and should be, sponsored by radiologists, radiation physicists, health physicists, radiobiologists and geneticists. As a matter of fact, since 1931, radiologists and physicists have appointed their representatives from national medical organizations to constitute the National Committee on Radiation Pro-

\*Professor of Radiology, University of Pennsylvania, Philadelphia 4, Pennsylvania.

tection. These representatives and their counterpart in the International Commission on Radiation Protection have formulated standards of good practice as they concern the use of x-rays, radium and isotopes in the diagnosis and treatment of patients and their uses in industry. These committees are continuing committees, and they publish handbooks which are available to anyone using x-rays or radioactive material. In addition, they have provided sage advice to state organizations and to the federal government. Such information has been of great assistance in the development of codes for protection of the public from unnecessary radiation.

I have been close to many who have been interested in radiation protection over the years. Their efforts have been very much like voices in the wilderness. Many experienced radiologists who agree with the principles of radiation protection, completely forget protective measures in their own practice. Some state that their work requires mitigated risks. Some have become foolhardy. I can remember in my earlier days of radiology that my chief, Doctor Henry K. Paneoast, had difficulty in getting me to protect myself. Another radiologist who was concerned with radiation protection in the program of the "Manhattan District" stated that one of his greatest difficulties was to get those who knew most about radiation hazards to take care of themselves.

The time has come when radiologists in the United States and elsewhere must fulfill their obligation to the community. In their practice the radiologic procedures should be done with a high standard of radiation protection. Those who will not employ protective measures will be forced to by people who are much less experienced. Evidence of this is the increasing number of states that are developing codes of legislation.

Taylor<sup>2</sup> emphasizes many of the points that are important in the educational program of protection from radiation hazards. To begin with, the radiologist must use common sense and must know how to do examinations without unnecessary exposure of the patients. He must know where to get information concerning radiation protection.

This information can be obtained from the handbooks that are prepared by the National Committee on Radiation Protection and are available through the Government Printing Office. Today, the development of x-ray diagnostic procedures is such that there need be no limitation for the desirable uses of the x-ray examinations.

In addition to radiologists, there are many general practitioners who own and operate x-ray equipment. Thus, they too are obligated to provide ample protection to their patients and associates.

It is important, therefore, that the modern radiologist not only learn the science of protection, but must learn to place the problem in its proper perspective for society. The man in the street is not satisfied to be "talked down to". He is not only concerned about the possibility of atomic warfare, but is concerned about the potentialities of all forms of radiation.

The key role of radiation protection is the obligation of the radiologists in their various places of practice, whether it be in an office or in a hospital. Those who have the privilege of teaching should obligate themselves to acquainting young trainees in radiology, medical and technical, with radiation protection. This is a very difficult problem. One can describe dramatic examples of radiation injuries, and still find it difficult to persuade trainees to develop a sense of obligation and dedication that is so necessary if one is going to carry out a very high standard of practice in radiation protection. In my own experience, I believe we have had more impact on young women than we have had on young men. Young women are more concerned about the hazards of radiation as it relates to child-bearing than are men. Those concerned with radiation, especially the radiologist, should know the background of a permissible dose. The present permissible dose to the whole body is 300 milliroentgens per week. Our aim should be to keep it well below that. The smallest amount of radiation is said to have some effect and it is also said that genetic damage may be possible from a single small dosage. The personnel in radiation departments must check and double-check each



other. I have found that I make fewer mistakes if my associates check me and I check them.

The radiologist should not take anything for granted. He has a sacred duty to his patients, his associates and to himself. I call attention particularly to the radiologist who works in a hospital and in an office. He should know whether the rooms in which he works are not only protected for those who work within the room, but equally important, for those who work in adjacent rooms. This is extremely important in office buildings and in apartments. It is the radiologist's responsibility or the responsibility of any general practitioner who uses radiation equipment to determine whether or not a hazard exists. One should get some outside physicist to check one's own staff. I have found that in our own office our physicists are likely to be more alert if there is a program of double-checking. The old story of "familiarity breeds contempt" is particularly true in practice where one is dealing with dangerous radiations which one cannot see or feel, and can only record with special instruments. This is a field where good work habits and constant thought are most important.

The subject of radiation protection is large and it is not the purpose of this presentation to analyze the various facets of the program. This is a program that needs careful study in each individual area where radiation procedures are carried out. In order to emphasize some of the features of protection, the following experiences are related:

A frequent examination that is made is an x-ray examination of the elbow for an injury or some other condition. A very common procedure is to have the patient (oftentimes a child) sit in a chair and place the elbow on a table or some such object for the examination. The tube is placed above the elbow and the exposures are made. Very few will take the trouble to put a lead-rubber cover or apron over the patient's body in order to protect the somatic and gonadal tissues from stray radiation or even direct radiation.

Another examination is the fluoroscopic and roentgenographic examination of the chest. Oftentimes, the fluoroscopist does not

know the output of his x-ray tube. The distance of the tube from the patient may be too short and there may be insufficient filter in the tube holder, thereby giving the patient unnecessary exposure. Oftentimes the fluoroscopist is surrounded by assistants and visitors looking over his shoulder and stray radiations from the patient spray those around the fluoroscopist, unless they are protected by lead-rubber aprons and other protective material.

When one studies the techniques that are used in making the roentgenograms of the chest, especially in children, one will note that the gonads of the patient are often exposed. This is unknown to the individual making the examination and consequently the patient receives unnecessary exposure. This could be prevented by the use of a protective screen and confining the x-rays to the chest and not including the complete torso. In addition to the screen, one should use the proper sized cone.

In practice, surgeons, particularly orthopedic surgeons, unnecessarily expose themselves, their nurses, assistants and patients in the reduction of fractures. This is an area in which the radiologist should continue to take a firm stand and continually remind his colleagues of the dangers.

Another common mistake is that those who use lead-rubber gloves and lead-rubber aprons buy them and never make an examination to see whether or not the protective gloves and aprons are really protective. In order to be sure of good protection, one must make x-ray examinations of gloves and aprons. The protective material may be irregularly distributed in the gloves and aprons, and this cannot be determined by looking at them.

I recall well a very distinguished radiologist who advised me to use ordinary kid gloves in doing fluoroscopy. He used himself as an example. He stated that, even after many years of fluoroscopy, he had no changes on his hands. Nothing could be a worse practice. I am glad to say that most young radiologists today are watching this hazard. The reason one does not like to use lead gloves is because they are heavy and

one does not have the freedom of palpation that one has either with the bare hands or with a thin kid glove. In fluoroscopy as with roentgenography, one must be very careful in protecting other parts of the body not included in the specific examination from unnecessary exposure.

Recently, the radiation physicists in our department have assisted members of the Health Department of the city of Philadelphia in studying and making a survey of dental x-ray units and fluoroscopes. At the time of their first report<sup>3</sup> information was obtained about 56 dental units. Since that time 400 additional units have been checked. It was found that the exposure dose rate varied among the machines, from a minimum of 32 r per minute to a maximum of 275 r per minute. About 50 of the units had insufficient filtration. The size of the beam varied from 3½ cm to 12 cm in diameter. About half of the units had field sizes which were much larger than necessary. You can see, therefore, that there was much overlapping of radiation exposure around the face when a full mouth examination was made. It was found that about two-thirds of the dentists were giving the patients higher exposure than necessary. The dosage at the apex of the teeth varied from 0.4 r to about 16 r per exposure. In our own unit at the University Hospital a dose to our patients is about 0.5 r per film and a full mouth examination varies between 10 and 14 films. It was estimated that about half of the dentists received too much radiation. Ordinarily, the dose rate at one meter should not be greater than 200 milliroentgens per week. The dose rate to a number of the dentists was as much as 1400 milliroentgens per week, and this is too high.

A total of 81 fluoroscopes were included in this survey. Twenty-two were located in hospitals and clinics. The rest were used by private practitioners. The output of these units varied between three r per minute to about 63 r per minute. The output should measure less than ten r per minute. Over half of the units had excessive outputs as they were being used. About half of the units were operated at a low kilovoltage and

had insufficient aluminum filter. About two-thirds of the fluoroscopes were producing excessive scattered radiation. Only 12 out of the 81 units met minimum safety standards. About half of the units were not shock-proof. Fifteen of the x-ray tubes had no protective tube-housing. About 69 of the units had insufficient un-illuminated border around the fluoroscopic screen. In other words, the beam was passing outside of and beyond the edge of the fluoroscopic screen. Only three physicians (all radiologists) had any idea as to the output of their machines. Only 11 of the units had any protective aprons attached to the screens between the patient and the fluoroscopist.

This is just a short abstract of many of the studies that were carried out, but serves to illustrate how intelligent people have completely disregarded x-ray protection for themselves, their patients and anyone assisting them. You and I must constantly raise questions as to the effectiveness of radiation protection, with ourselves and with our friends and with all people working with radiation of any type.

Many patients throughout the country are treated with radium and other radioactive sources. Our experience has led me to believe that very few physicians who use radon ever measure the sources, before these units are implanted into patients. Spot studies done by us have shown that sometimes one purchases radon from a certain company (two in our experience) and the small seed may contain several times the amount of radon ordered or it may not contain any. One cannot tell by looking at a seed whether or not it contains radon. The only way one can tell is to measure its output, and this should be done before it is implanted into any patient. I know of one institution that has used radon for years and I was told that they never measured the individual tubes. They would draw off the radon into a tube which measures approximately 100 cm long. The tube was cut into the desired length (1 cm) and it was assumed that the radon was distributed equally throughout all of the small tubes. If there were 100 tubes and the measurement of the tubes showed them to contain

100 millicuries, each tube was thought to contain 1 millicurie. Our experience has not led us to believe that such estimates of dosage is safe practice.

Many of our radium needles and tubes are supposed to have the radium equally distributed throughout the unit. If one examines these tubes, especially the ones that are five to 20 years of age, one finds that the radium may be in one small portion of a needle instead of being distributed equally throughout its entire length (one to ten or more cm). Likewise, many of these needles, when implanted are injured at the time of implantation. This weakens the seal of the radium tube and allows gas to escape and this gas is radioactive. Unless one constantly measures these units and tests them for gas leakage, radon gas may fill the vault in which these tubes are deposited and escape into the atmosphere where it can be breathed into the lungs and ultimately be deposited in the bones.

There are very precise ways of learning about stray radiation from any source. With x-ray apparatus, one can make x-ray examinations of the tube heads. In our own office we found x-ray tubes that we thought were leak-proof and yet they were found to be defective. We have found portal sizes too large, more than 36 inches, when we thought the portal size was something of the order of 14 inches. Another method is the use of film badges for detection of radiation exposure. These badges should be taken care of by a specific person, because the average individual is not likely to be careful. One must put the badge where it is likely to be exposed if exposure is occurring. This may be on the hands, or it may be on the shoulders, or it may be on the legs, or elsewhere. One must determine if there is stray radiation and where it comes from.

Radiation is silent. One cannot see it and one cannot feel it. The only way we can determine the hazards of radiation is to have a definite program of radiation safety examinations and these should be done at intervals sufficiently frequent to prevent anyone from being injured. I again strongly suggest that one should not only depend on one's self,

but one should be checked by some outside individual. In that way, one is less likely to overlook dangerous radiation.

With the widespread distribution of radioactive isotopes and the increasing publicity concerning fallout, the States and the Federal Government began to be concerned about legislation on radiation protection. Many of us have studied some of the legislative proposals of the various states and have offered advice in the development of these codes. I personally, along with many others, have tried to persuade those who are in charge of state legislation not to make it necessary to get a license to use radiation equipment and radioactive materials. I feel that if the state codes requires registration of such equipment and will make spot checks on the installations, they would have fulfilled their obligation to the community. On the other hand, if the state has to inspect and license all equipment going into offices and hospitals there are insufficient radiation physicists to do the job. Likewise, many of the state codes are not uniform. Some states require certain specifications and others do not. If manufacturers had to develop certain equipment for Pennsylvania and an entirely different type of equipment for New York and the other 48 states, one can see that the manufacturing costs soon would become prohibitive. Legislation requiring registration of equipment and a small staff of health physicists to examine continually a few places each year will serve a very useful purpose especially if those who administer the code preserve a certain sense of humor and good common sense.

In concluding this discussion, I want to emphasize again that my comments have been limited to a few of the problems concerned with radiation control. I have been self-critical, in order to emphasize that the problem is not easy and it deserves the best consideration on everyone's part. I am not alarmed about this problem of radiation protection and I do not think there is any real reason to be alarmed. We can still do all of the necessary x-ray examinations that are needed by patients. These studies should be done carefully and those doing them should



exert every possible effort to protect themselves, their associates and the patient.

We as radiologists or any of us who use radiation equipment must reduce the patient exposure in all diagnostic examinations, especially to the gonads. We should be careful about exposure of the growing fetus and children. We should use gonad shields and we should have adequate tube filtration and kilovoltage. We should use tube cones that would confine the exposure to the film being used. If that is done, we will have direct evi-

dence of the amount of radiation given to each individual and just where the radiation is administered.

#### REFERENCES

1. Lamerton, L. F.: An Examination of the Clinical and Experimental Data Relating to the Possible Hazard to the Individual of Small Doses of Radiation. *Brit. J. of Rad.*, 31: 229, 1958.
2. Taylor, L. S.: Education in Radiation Protection. *The Amer. J. Roentgenol., Rad. Therapy & Nuclear Med.*, 73: 193, 1954.
3. Gorson, R. O., Halvorsen, R. M., Lieberman, J., and Aitkens, E. V.: A Limited Survey of Radiation Exposure from Dental X-ray Units. *Radiology* 72: 1, January, 1959.

## THE GREENVILLE COUNTY MEDICAL SOCIETY HISTORICAL SKETCHES

### 2. GREENVILLE'S PIONEER DOCTORS

J. DECHERD GUESS, M. D.

This is the second of a series of articles, adapted from the book *A Medical History of Greenville, South Carolina*, written by the same author, and which will be published by the Greenville County Medical Society in 1959.

The political and social history of Greenville began in 1784 when the area was opened up by the State for settlement. Cherokee lands extending westward to the western border of present Oconee County and including present Greenville County had been acquired by the State shortly after the end of the American Revolution. By 1790 the population of the county was 5,000. Ten years later, it was 11,500. So far as is known there were no physicians in the county at that time.

By 1836, however, there were seven physicians in the county, and five of these lived in or near Greenville. Dr. Richard Harrison had come to the area before the village was incorporated. Other Greenville doctors of this early period were Dr. Thomas Collins Austin, a younger brother Dr. William Lawrence Austin, Dr. Andrew Berry Crook, Dr. Robinson M. Earle, Dr. Osmyn B. Irvin and Dr. Michael Baylis Earle.

Both Dr. Thomas and Dr. William Austin received their M. D. degrees from the University of Pennsylvania.

Dr. Osmyn B. Irvin was mayor of Green-

ville in 1846. Because of his wife's ill health and his own "weak constitution" he retired from practice early in life. From the time of his retirement until his death, he spent the winters in Florida where he accumulated extensive farming interests. Whether because of his early retirement or because of the healthful influence of Florida's winters, and in spite of his weak constitution, he lived to be 78 years of age. He died in 1880.

Dr. Robinson M. Earle was killed in 1838 by William Lowndes Yancey in a political squabble. His friends said that he had been murdered, but his assailant was tried for murder and was acquitted. The trial was notorious, but there seems to be little more known of the doctor than the circumstances of his death. He undoubtedly was an early member of the outstanding Earle family which was to furnish so many prominent physicians to the county.

The most prominent and the best remembered of this early group of Greenville doctors was Dr. Andrew Berry Crook. He was very prominent in the early social, professional, and political life of Greenville. He was born in 1802. He studied medicine in Transylvania College in Lexington, Ky. He came to Greenville about 1827. He and Ben-

jamin F. Perry, who came to Greenville to study law at about the same time, became life long friends. Neither of them was married. They lived in an excellent resort type hotel, of which there were several in Greenville at that time. They entered actively and enthusiastically into the social life of the community.

There still exists a tradition that Dr. Crook continued anatomical dissection after locating in Greenville. Bodies of executed criminals could be had in exchange for a plug of tobacco. The doctor's office was a two-storied structure. It was believed that he disposed of the bones of his subjects through a chute in the chimney. Human bones have been dug up in the vicinity of the doctor's former office.

There was a news item published in the *Greenville Mountaineer* on August 20, 1847, which illustrates Dr. Crook's interest in medical progress and the breadth of his clinical attainments. It read:

"Letheon tested in Greenville. Boy ten years old operated on for cataract in both eyes while under influence of Letheon (derived from the word lethe, meaning complete loss of memory). Administered by Dr. C. Rabe through apparatus of his own contrivance; operation skillfully performed by Dr. Crook. Insensibility to pain perfect. Felt fine after operation and declared himself ready to breathe Ether again."

This use of ether for anesthesia in Greenville was five years after Dr. Crawford Long's unreported first operation under ether anesthesia and only one year after Dr. Warren's use of ether in the first public demonstration of its usefulness.

Dr. Crook was widely read, and he was considered to be a scholar. He is said to have written extensively on agriculture, medicine, and surgery. He had a large plantation, and he owned a hundred slaves. He raised fine cattle.

He was a greatly beloved family doctor, but he found time for many other pursuits. He was mayor of the city in 1853-1854. He was on the board of trustees of Greenville Female College, now the Woman's College of Furman University. He was active in state

and national politics, and he worked hand in glove with Benjamin Perry to prevent nullification first and then secession. He was an intimate friend of John C. Calhoun.

Although he was never challenged to a duel, his manner was brusque, and he made enemies. He acted as Benjamin Perry's second, when his friend had to fight, and the doctor instructed him in marksmanship before the duel.

Although he had strongly opposed secession, after South Carolina had withdrawn from the Union, he supported the Confederacy wholeheartedly. He was too old for active campaigning. However, when a Dr. Hoke, his friend and a protégé, was wounded in Virginia, Dr. Crook hastened to him to give him medical care. While in Virginia, he volunteered as an army surgeon. He had soon overworked himself, and he returned to Greenville to die. Death came in 1862, so that he was spared the horrors of Reconstruction and was denied the satisfaction of observing Benjamin Perry's fine service to the state during that time.

Dr. Burrell Chick was probably not included in this group of seven pioneer physicians, because he was not in practice. He had come to Greenville in 1825 as an early physician emigrant to the relatively young frontier county of Greenville. He had lived in Newberry. Greenville was already recognized as a fine health resort because of its clear skies, invigorating air and mild climate. Mineral springs throughout the country had become valued for their baths, and, no doubt because of the unpleasant taste and smell and the laxative effect of their waters, they were valued as a remedy for several chronic diseases. Chick Springs was one of these. After analysis of the water, Dr. Chick bought the property, named it Chick Springs, and built a resort type hotel there. The hotel soon was crowded with guests, and the place rapidly became famous for the remarkable cures brought about by the water of the springs.

Dr. George Trescott is one of the most interesting and unusual physicians of the Civil War period. He was born in Charleston about 1820. He came to Greenville during the Civil War. The following rhetorical eulogy,

written by Dr. J. W. Jervey, Jr. and delivered before the Greenville Medical Club about 1930, draws a vivid picture of this brilliant man.

"Not too often are sung the praises of men like Pasteur, Lister, Osler, and a host of others whose lives and works are in some degree known to most of us; nor yet enough are voiced the merits of many less well known physicians who have played invaluable parts in establishing the precedence of our profession. We do not have to look far afield to find characters gone, but not forgotten, who are worthy not only of our notice but of our attention and study as well. For these reasons I present tonight a short biographical sketch of one of our local doctors who, through his personality and learning, acquired a wide reputation, and was highly valued as a citizen of Greenville. I will ask your indulgence if dates cannot be given, and if many points of biographical interest are omitted. I have been unable to find any written record of him. For what follows, I am indebted to several older citizens who knew him personally, especially to Dr. Davis Furman who attended him in his last illness.

"Born in Charleston about the year 1820, George Trescott may be pictured as passing his youth in the usual manner of the day in a city where aristocracy flourished and gaiety was expected and enjoyed. He possibly went to the Porter School, and probably later to the College of Charleston, and to the Charleston Medical College where certainly he later served for some time on the medical faculty. He was the brother of William Henry Trescott who later intermediated with Spain for the United States in the Spanish-American War. He also had two sisters, Kate and Sally with whom he lived for many years, bachelor and two old maids, on the corner of Vardry and Anderson Streets in Greenville.

"At the time of the War Between the States he and his family moved from Charleston to Pendleton. He was appointed and served for a time during the Civil War as assistant surgeon general to the Confederate Army. After this he moved to Greenville where he resided until his death.

"Rather short, of stocky build, he had a

decidedly foreign and at the same time distinguished appearance with his spectacles, ruddy complexion, long drooping mustache and goatee hiding not too stern a jaw. It is said that he greatly resembled Li Hung Chang, probably the greatest Chinaman who ever lived, and of whom General Grant, though one probably not too well qualified to judge said he was the greatest soldier, the greatest financier, and the greatest scholar he had ever known.

"Dr. George Trescott was a true philosopher, a man of brilliant intellect and pleasing personality. He was punctilious to the Nth degree and was ever irreproachable in the ethics of his associations with the fellow members of his profession. Peculiarly enough, while he could remember a printed page, and could at a moment's notice give you an accurate description of any disease about which you asked him, he always had great difficulty in diagnosing the commoner skin diseases and the exanthemata. He seemed to lack that cerebral photographic ability which impresses a picture on the mind and enables one to recall from past experience certain likenesses which from time to time recur in our daily practice. In this connection it is rather amusing to note that he frequently drove off in the wrong carriage because he never seemed to recognize his own horse.

"Like the average man of his day, and like a great many of us here tonight (and be it said not in criticism) he liked his brandy on occasions. He never drank until the day's work was done, and then only at home. On rare occasions when someone called for the doctor on a night when he had been enjoying himself in a gentlemanly fashion, Miss Kate or Miss Sally would say, 'I'm sorry, sir, but the doctor is not very well this evening.' He was never in his life seen under the influence of liquor, yet there were at times certain rumors.

"Mr. Theodore Hayne, when he moved with his family from Charleston to Greenville, consulted Dr. Geddings as to whom he had best have for his family physician. The reply was 'George Trescott.' 'But, sir,' said Mr. Hayne, 'Isn't it true that he drinks a little too much?' Said Dr. Geddings, 'Drunk or



sober, sir, he has more sense than any of the rest of 'em.'

"The manner of his death in 1890 was unusual, and we may all hope for no more satisfactory way in which to pass on 'to where beyond these voices there is peace.' He suffered from cardiorenal disease and was attended in his last illness by Dr. Davis Furman. He knew that the end was not far away and arranged with Dr. Furman to have him administer a hypodermic of morphine a few hours before death if possible. A few days later, the old gentleman's breathing was very laboured, and when Dr. Furman arrived, the patient said to him, 'Don't you think it's time for the morphine?' Dr. Furman, taking in the situation, said, 'Yes.' Accordingly, the sisters were called in and the old man gravely shook hands with each. Not a tear was shed. Believing that a full dose of morphine would probably put the old gentleman out of the world, Dr. Furman gave him only 1/16 gr. for which Dr. Trescott feebly raised his arm. He rubbed the spot a moment or two, folded his arms on his chest and several minutes later was gone. He had literally willed his earthly life away.

"Greatly missed by many as friend and physician, he was buried in Pendleton where some of his Treseott relatives still live."

Dr. Samuel S. Marshall (1819-1883) was a worthy contemporary of Dr. Trescott.

He graduated from South Carolina College, now the University of South Carolina, in 1838. His medical degree came from the Medical College of South Carolina. In 1879 he became president of the South Carolina Medical Association. He was not only a prominent physician, but he became an outstanding industrialist.

Dr. Marshall established a large and influential family in Greenville. He was the great grandfather of Betty Allison, wife of Dr. H. M. Allison. They have the original manuscript of a long paper on, "Inflammation and Ulceration of the Cervix Uteri." Dr. Marshall wrote a beautiful hand. His style was rather flamboyant. His thesis was as modern as if written today. It was that women should overcome their innate modesty and submit to early and complete examination when they

find themselves experiencing unpleasant symptoms of female disorder; and that the physician's examination should always include visualization of the cervix using a uteroscope or speculum uteri, his name for the vaginal speculum.

Dr. Marshall wrote: "As the dove will clasp its wings to its side and cover and conceal the arrow that is preying upon its vitals, so she (who is subject of some disease of the womb and its appendages) in melancholy silence broods over her condition until her system, mental and physical, is wretched and she falls a victim to a premature grave. Modesty in a virtuous woman is a jewel to be highly appreciated and scrupulously guarded, but that modesty which costs so great sacrifices deserves not the name, is false and criminal . . . A delicate and well educated touch cannot reveal to us the different shades of color of the inflamed mucous membrane . . . the slight epithelial abrasions, the fissures, ulcerations, exereescences . . . the uteroscope alone can give that knowledge . . . I would not be understood as recommending a prostitution of our delicate and high privileges by too frequent and promiscuous examination, but that it should be resorted to as seldom as possible."

There was something characteristic about almost each one of the Civil War group of Greenville doctors.

Dr. Thomas L. Lewis wrote as his graduation thesis on essay on typhoid fever, basing it upon the successful treatment of forty consecutive cases. He employed cold sponging, and he got the necessary ice from the ice house of John C. Calhoun.

Dr. Peter Hillhouse, so wrote Alfred Wilkes in "Echoes and Etchings," "Was very venerable looking though not so old. Spare-made—long, white, flowing beard, walking cane—long dress coat and silk hat."

Dr. William J. Dargan was the only medical doctor in Sumter County during the Civil War. After the war he moved to Greenville because of his health. He established the town's first book store.

Dr. Dargan was in Charleston at the time of the attack on Fort Moultrie. He watched the battle from the Battery. In a letter to his

wife, he wrote a vivid description of what he saw.

Dr. William H. Austin lived to be 85 years of age. He died in 1914. He was exempted from military duty in 1860 because, "he had recently married and was a physician." His physician father effected an exchange and took his son's place in the army.

Dr. David Ross Anderson, a student of Latin and Greek at Tholian Academy in Anderson County, a graduate of Jefferson Medical College, practiced medicine in the Fairview Presbyterian community for over half a century. He was credited to have been one of the best diagnosticians in Greenville County. It was said of him that "he could tell what was wrong with a man by looking at him."

Dr. Benjamin F. Few established an outstanding family. He was born in 1836 and died in 1923. His family had come to Pennsylvania with William Penn. It was one of the early families to come to Greenville County after the American Revolution. The Fews were Quakers, but when the Wesleys came to America to introduce Methodism, they joined the movement.

Dr. Few practiced first at Marietta, in the upper part of the county. He served as a surgeon in the Confederate Army throughout the war. After the war he practiced for a short time in the Sandy Flat community. He then moved into Greer, where he became its leading doctor. A son, William P. Few, became President of Duke University.

Someone wrote of Dr. Few:

"All his life Dr. Few interested himself in

good works and especially those causes pertaining to the betterment of the public health, the church, and the schools . . . he was always to be found aligned squarely behind the great moral and social causes of mankind. His community, his country, and his state are richer that he lived."

Dr. J. H. Maxwell, said to have been a man of superior intelligence and excellent attainments in general science and literature, might have been referred to as Greenville's first gynecologist. His practice dealt chiefly with diseases of women.

He was highly accomplished in his profession, and he was regarded as a Christian gentleman of elevated character "as every gynecologist should be."

Dr. J. M. McClanahan was associated with Dr. George Trescott in opening and operating the Greenville Infirmary. It was Greenville's first hospital for civilians. It was closed after one year of operation.

These, then, were the outstanding members of a galaxy of doctors who practiced in Greenville from its earliest pioneer days up to and through the Civil War period. It furnishes a fleeting view of Greenville's medicine during the first century of its history. Not one but who had a medical degree from a good medical school. Not one but who was an outstanding man in his community. Some had had a classical education before they studied medicine. The day of the medical diploma mill had not yet come. These doctors were outstanding citizens, beloved general practitioners, men interested in politics, and were civic and religious leaders.



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Endocardial Fibroelastosis

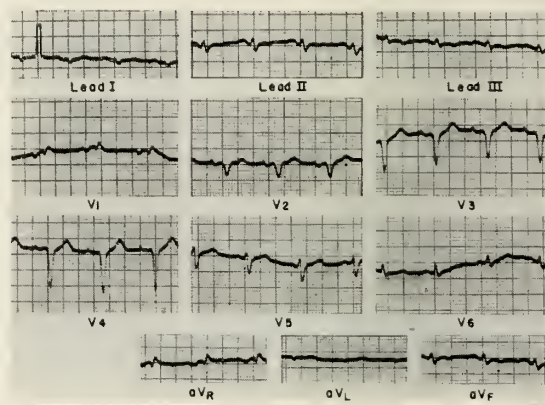
DALE GROOM, M. D.

From the Dept. of Medicine.

*Case Record*—A man 45 years of age, of the white race and with no history of any previous cardiac disability, complained of dyspnea, orthopnea, and pleuritic pain. His illness over the ensuing three years was one of congestive heart failure which was progressive with little response to the usual measures of therapy. It was characterized by an increased venous pressure, recurrent pleural effusions and ascites, dependent edema, and a diffusely enlarged heart with reduced excursion of the borders as observed fluoroscopically. Additionally there was a murmur of tricuspid insufficiency and venous pulsation was demonstrable in his massively engorged liver. He was studied extensively in several institutions before his death at 48, but a definitive diagnosis of the etiology of his congestive failure was never established, in spite of exploratory operations of the chest (for constrictive pericarditis which was not found) and abdomen, cardiac catheterization, and an angiocardigram. Venous and hepatic congestion were consistent findings throughout the illness. There was no hypertension, fever, nor eosinophilia, and the blood sedimentation rate remained normal.

At autopsy the heart was found to be grossly dilated with a weight of 480 grams. Thickness of the right ventricular wall was 6-8 mm. (more than double the normal measurement) and of the left, 13 mm. The endocardial surfaces of the left ventricle and left atrium were covered with a layer 1-2 mm. thick of grayish, opaque fibrous tissue which microscopically was observed to dip between the bundles of cardiac muscle and to show an increased vascularity at its base. To a lesser extent the right ventricle was diffusely involved, particularly at its apex, and there was a patchy distribution of the same opaque fibrous thickening of the endocardium in the right atrium. The tricuspid valve ring was appreciably dilated. Though the valve leaflets were normal, there was a suggestion that the posterior leaflet of the tricuspid may have been partially immobilized by the presence of additional thread-like attachments to the ventricular wall.

Special stains of the thick layer of fibrous and collagenous material revealed many elastic tissue fibers, somewhat fragmented, but in a quantity and distribution similar to that found in infantile cases of endocardial fibroelastosis.



*Electrocardiogram*—Amplitude of the QRS complexes is strikingly low throughout, well under 5 mm. in all three standard leads. The P waves are seen in lead II to be abnormally broad. The heart is vertically disposed and there appears to be some clockwise rotation (as viewed from below, shifting the transition zone toward the left precordial leads). Even so, there are no R waves as far to the left as V<sub>1</sub> except for the small R in V<sub>1</sub> where the intrinsicoid deflection occurs very late after onset of the QRS. Width of the QRS complexes is 0.10 sec.

The T waves are rather flat or inverted in some leads but their amplitude is commensurate with that of the corresponding QRS deflections. There is a regular sinus rhythm at a rate of 88, and the P-R and Q-T intervals are within normal limits.

*Discussion*—The main conclusions one may draw from this tracing are that the electrical activity of the ventricular myocardium is impaired, and that perhaps the atria may be enlarged because the time required for transmission of the impulse from the SA node to the AV node is prolonged. Abnormally low voltage of the QRS complexes in the presence of known cardiac enlargement is an ominous sign. Moreover a portion of the anterior wall appears to be involved in some destructive process such as a previous infarction, though the malposition of the heart, its clockwise rotation and abnormal ventricular conduction all contribute some uncertainty to this. Probably there is an incomplete right bundle branch block (which in later tracings became complete with a QRS of 0.12.) This electrocardiogram is therefore suggestive of a very extensive myocardial disease process, possibly one placing an increased burden upon the right ventricle and the atria.

Endocardial fibroelastosis is a rare disease which is sometimes considered in the differential diagnosis of cardiomegaly with unexplained congestive failure. The disease has been regarded as a congenital one which



usually progresses to a fatal termination in infancy or early childhood. Recent reports from several parts of the world of an adult form having similar pathologic and clinical characteristics suggest that it might be acquired, but the etiology is unknown. The net effect of the layer of fibrous tissue seems to be mainly a mechanical one of splinting the myocardium and limiting its contraction or expansion or both. This disease has been aptly called "constrictive endocarditis."

The relentlessly progressive congestive failure illustrated in this patient's case is considered typical of endocardial fibroelastosis. Presumably the burden was passed quickly from the heavily involved left ventricle back to the right side of the heart with the resultant venous and hepatic congestion, dependent edema and ascites. Valvular lesions are not regarded

as characteristic of endocardial fibroelastosis; in fact, the absence of significant murmurs in a large failing heart is a point in favor of the diagnosis. Whether the tricuspid insufficiency here was due simply to dilatation of the valve ring with consequent failure of apposition of the cusps, or to retraction of the cusps by the abnormal fibrous tissue is uncertain.

Conduction disturbances have been reported and might be expected in a disease which involves so invasively the endocardial surfaces of the heart. Mural thrombosis and embolization have also been described but were not observed in this case.

#### ACKNOWLEDGEMENT

Special thanks are due Dr. Edward E. McKee of the Dept. of Pathology for the pathologic studies he carried out on this unusual case.

---

*The role of psychotherapy in modern medicine* by Norton L. Williams, M. D., (Charleston) South. M. J. 52:299 (March 1959)

This paper represents the first in a series of papers to be offered to the practitioners of medicine and surgery in general, in an attempt to deepen the understanding of the entire field of dynamic psychotherapy for the practice of medicine at large. The depth and the power of unconscious forces at work in health and disease is emphasized as a basic understanding required, in order to be enlightened about this field.

In the past, attempts to rationalize the rightful place of psychotherapy into the general field of medicine and surgery has been based primarily on the psychosomatic aspects, that is, the relationship of emotional forces to the production of physical disease. This paper affirms this. It goes further in stating that the main reason in including the field of psychotherapy as an integral part of medical practice is based on the fact that any deviation from normal organismic functioning, whether it is a physical organ, or region of the body, or part of the personality that is not functioning satisfactorily, belongs to the sphere of medicine.

The final part of the paper deals with the importance of psychotherapists spending time with referring doctors, demonstrating to them the specific emotional factors that may first show themselves in the relationship of the patient to the referring doctor. In other words, a good deal of the patient's problem may demonstrate itself in the way that the patient originally relates himself or herself to the referring doctor. Other articles elaborating on these ideas will be brought out in separate papers.

---

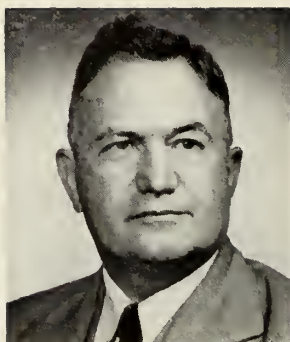
*A comparative study of aortic occlusion alone and of potassium citrate arrest during cardiopulmonary bypass* by D. D. Nunn, M. D., C. A. Belisle, M. D., W. H. Lee, Jr., M. D., and Edward F. Parker, M. D. (Charleston) Surgery 45: 848, May, 1959.

In order to prevent excessive blood loss and allow for adequate visualization during cardiopulmonary bypass for correction of intracardiac anomalies, it is usually necessary to utilize some adjunctive measure to control coronary circulation. Initially, coronary blood flow during bypass was controlled by intermittent aortic occlusion, but this method has now been replaced for the most part by chemically induced cardiac arrest.

A comparative study of the effects of aortic occlusion alone and of potassium citrate arrest during cardiopulmonary bypass was performed in dogs. Eighteen dogs were perfused by a splanchnic pump at flow rates of 40 and 60 ml. per kg. per minute. A DeWall type bubble oxygenator was used. Cardiac arrest was induced in 9 dogs using a 2½% solution of potassium citrate in oxygenated blood. The duration of arrest ranged from 5 to 20 minutes. Temporary aortic occlusion alone was produced in a similar group of 9 animals. The aorta was occluded for 5 minutes in each animal. Both groups of animals had a right ventriculotomy performed during bypass.

Seven of the nine animals subjected to cardiac arrest with potassium citrate developed either ventricular fibrillation or ineffective cardiac action following arrest. In only one of these seven animals could the cardiac action be reverted to a normal sinus rhythm with an effective beat. Ventricular fibrillation or ineffective cardiac action did not occur in any of the animals who were subjected to 5 minutes of sustained aortic occlusion alone.





## PRESIDENT'S PAGE

### **SOCIAL SECURITY versus PRIVATE INSURANCE INVESTMENT**

Now I am referring to you Doctor (M.D.) as an individual who has the education far in excess of most professions, to think what you wish to do with your profits. In the first place, your earning years have been cut 6 to 10 years, as it requires that much more time to prepare for the practice of medicine than it does for law, engineering, and many of the like professions. You must make hay comparatively rapidly to be able to bale it. I can understand perfectly why a man in his thirties wants Social Security as it implies protection, but it is a misnomer, and is as much a blight on the American Investor or United States Dollar as was the blight with the chestnut trees. It is my wish to protect the young doctor from this evil and scavenger, which is one reason why I continue to oppose this raid on the United States Treasury. Have you ever seen an accounting of the expenditures and income from Social Security, yet it has been in existence in the United States for ten years. It means that our grand and great grand-children will be paying for our folly.

Why can't we wake up and realize that "Uncle Sam" should be treated like an ordinary individual and not in the stature of a money tree that shakes off money for anyone who comes near him. The government, and by that I mean our Congressmen are selling us short right down the drain of iniquity. I wrote my Congressman last week, July 6, 1959, "when were they in the House of Representatives going to have guts enough to say No?" Suggest that you do the same. There is nothing more powerful in this country than the vote—use it.

The number of ballots cast in this state (South Carolina) in the South Carolina Medical Association was approximately one thousand, but the result was frightening—only 12 more votes against Social Security than there were in favor of it;—always something for nothing, and I do agree that we are paying for something all the other people are getting and we are not deriving any of the benefits. If you have reached the age of 53 or beyond, it will pay you to join the Social Security.

You can call it a principle or any term you choose, but until Mr. U. S. Government Official quits robbing Peter to pay Paul . . . i.e., let's have an accounting to see how honest this department is run. We would rejoice in having a Jenkins-Keogh Bill that would allow the M.D. to deduct four to five thousand dollars per annum for his insurance savings.

I spoke against Social Security in Atlantic City, N. J. before the Reference Committee of the American Medical Association, using this as an example; The bees produce honey and the nectar is very sweet, with an unusual excellent taste, and even the odor is delectable. The bees live in hives and all the bees follow the queen bee into the hives. Well, our hive is the Capitol Building in Washington, and before we have finished with Social Security we are going to discover that our hive is going to be frosted (covered) with uric acid crystals.

William Weston, Jr.

# Editorials

---

## PUBLIC RELATIONS COMMITTEE

The Public Relations Committee set up at the last annual meeting of the Association has been working on a plan for setting up a series of telecasts which will be done by the members of the Association, and which will bring to the public some discussion of matters of interest in ideas and philosophies of organized medicine.

Plans are being made to have these showings from the television stations in Anderson, Columbia, Charleston, Florence, Greenville, and Spartanburg so that the whole state should be pretty well covered.

The Committee has had a very kind reception of the proposals from the managements of the various television stations and has written to the county societies in the several cities to ask whether it might count on local support for the program. Topics for the telecasts would be selected and coordinated by the Committee with the aid of its public relations counsel and presentations would be made by local physicians, probably in the form of panel discussions on a monthly basis. Material for presentations which have to do with the general attitude and program of the state or national associations would be furnished to the participants so that they would be fully conversant with the official points of view. More technical subjects such as cancer, tuberculosis, mental health, etc. would also be included in the series.

In order to hope for any success with this program, it will be essential that the effort be agreeable to the local societies, and that there be enough doctors available to put on the programs. It is felt that such a series of presentations might be extremely valuable and would offer an opportunity to get before the public in proper perspective many of the matters which concern medicine and the public individually and together.

---

## OLD AGE AND SURVIVAL

Listeners at the recent Annual Meeting and

readers of this *Journal* may find themselves in a slight grade of uncertainty as to what the future holds for old people. At our Annual Banquet we listened to an able address by Dr. Gunnar Gunderson in which there was pointed out that there were many avenues of interest for the older person, that the old person must and should keep up with events and participate in activities, and that this same person was still a valuable member of society. At the same session we heard a talk by a member of the military establishment concerning the arrangement of effort for securing survival in catastrophic attack. To the latter speaker the only important qualification for survival seemed to be youth, and indeed he said that if the injured bank president was lying side by side with the injured youth, (whether the latter be a juvenile delinquent or worse?) that efforts were to be directed to the salvaging of the young person rather than the old one, so that for the future rebuilding of a shattered world the energy and ability of youth could restore what might have been considered to be an advanced civilization.

To the older listener, these two philosophies did not seem exactly to concur. If one is to now expend great effort to improve the conditions of old age and its now restricted activities, in the face of possible catastrophe in the near future it might seem foolish to devote so much effort to the class of people who would be least regarded if choices should have to be made. Without attempting to deny the thesis that the young would be the better builders of a world partially destroyed, one might still question whether the youthful members of the population would be equipped by knowledge, experience and wisdom to do the rebuilding in the better sort of way. The fact that the stricken victim of atomic damage is a bank president indicates that to some degree he must be a man of intelligence, or at least a canny man, and perhaps would imply that his brain might be a more valuable brain to the world in general than the immature



brain of a person whose qualities have not yet been demonstrated nor his abilities tested. Certainly in the midst of an effort to salvage the valuable parts of a stricken population, there would be no time for performance of intelligence tests and other estimates of the intellectual ability of the victims, but at least it seems that the simple classification of youth as the only criterion for applying medical salvation might be questioned. Such a selection is rather likely to be doubted by the older members of the population.

### SOUL SEARCHING

In a recent issue of one of the "throw away" magazines, there appears an article with the title "Down with Entertainment Deductions"! The theme of the article is that while a physician may legally spend money on entertainment of his colleagues, it is doubtful that he is morally justified in using this form of return for favors rendered by the beneficiaries of the entertainment. The tax man will allow deduction of expenses for a fishing trip or an evening at the theatre, or similar forms of entertainment when they are provided for people who in one way or another may better the practice of the physician who is doing the entertaining. According to the writer, such entertainment is simply a form of fee-splitting and is to be frowned upon in the same way as that practice is scowled at by medical bodies.

While we have the soul up for examination, perhaps we ought to look into the question of the morality, perhaps not the legality, of some of the deduction which some of our physicians make for extended tours to foreign parts, where they may attend some medical meeting as a pretext for a pleasure trip. This seems to be fairly common practice, and as far as available information goes, is acceptable to the income tax authorities. Certainly many of these trips are quite legitimate, and medical and personal betterment are the objectives, but it is also very likely that a very large percentage of these expeditions are taken not because of the scientific attraction at the end of the line, but because of the sideshows incidental to a trip abroad and not concerned in any way with medicine. Our consciences must guide us in

these things. Perhaps deductions allowed in these matters are not the best means of arriving at a smaller tax payment.

### WORDS

The American (English?) language is a wonderful thing. Its daily growth makes one dizzy trying to decide whether the growth is an honest development of a benign wart or a malignant cancer. The noun-into-verb manoeuvre continues to be a very popular exercise, frequently indulged in academic circles. Incidentally, an academic circle appears to be what academicians go around in.

Even the respectable J.A.M.A. slips into a little queer conversation at times. Though it must be admitted that this was in the department of anecdotes in the back of *The Journal*, it was a little alarming to see the statement that someone had come "training in", meaning that the someone had arrived by train. In the academic halls near us, a patient is "conferenced", a process indicating that he has been presented at a conference. It often appears that the patient "presented" at the hospital or clinic, but what he presented the history does not say. Presumably he presented himself, or perhaps he just presented arms. It is hard to fathom these intransigent verbs!

### COMMITTEE ON INFANT AND CHILD HEALTH

The Infant and Child Health Committee of the South Carolina Medical Association initiated a Neonatal Death Study in certain hospitals within the state starting on January 1, 1958. The hospitals involved in this study are Columbia Hospital, Greenville General Hospital, Roper Hospital, Cherokee Memorial, Self Memorial, Spartanburg General, McLeod Infirmary, Medical College Hospital, and Marion County Hospital. Statistical studies are being done on deaths in these hospitals of infants under 28 days of age.

The completion of these forms is quite slow, and the Committee is quite behind in getting the information summarized. We think it would be interesting to the readers of this *Journal* to see a little of what we have summarized to date.

One hundred and fifty forms for 1958 have been completed and summarized. This is only a small proportion of the total neonatal deaths in these participating hospitals during 1958. Half of these were white and half of them colored. As expected there are a large number of small infants but a surprising number of large infants born at term and ap-

session and considered and acted upon several items of importance.

The action of the House of Delegates at the Annual Meeting in May in approving the previous recommendation of the Insurance Committee last year of the plan for professional liability insurance proposed by the St. Paul Insurance Companies was recognized and discussed and the State Agent of the Companies, Mr. E. B. Sample, of Columbia, was authorized to proceed with the presentation of the plan to the members of the Association as proposed. With the technical assistance of Mr. Sample, cooperating with the Executive Office of the Association, a letter, approved by the Committee, will be sent by Dr. Evatt, the Chairman, to each member of the State Medical Association outlining the salient features of the plan and the means whereby this malpractice insurance program can be put into effect.

The Committee then heard, separately, proposals for business expense insurance for the members of the Association by two companies interested in writing the business. Mr. William A. Crawford, State Agent, The Educators Mutual Life Insurance Company, Columbia, first presented their proposal, after which Mr. John Cappleman of The General Agency, Charleston, presented a proposal on behalf of the Continental Casualty Company for a similar program. Each of these gentlemen was heard in the absence of the other and the various phases of their separate policies were fully discussed by members of the Committee with the respective representatives.

Following discussion of the two proposals in executive session, the Committee voted to recommend the proposal of the Continental Casualty Company. In addition to Dr. Evatt, Dr. Frank C. Owens, Dr. Richard W. Hanekel, members of the Committee, Dr. William Weston, Jr., President of the Association, and M. L. Meadors, Executive Secretary and Counsel, were present and participated in the discussion.

Following the business session, the Insurance Committee and those meeting with them were the guests of the Health Insurance Council Committee at dinner in the Hotel Columbia.

Among the 12 physicians included in 129 members of the Presidents Citizens Advisory Committee on the Fitness of American Youth is Dr. John R. Paul, Jr. of Charleston.

---

## CORRESPONDENCES

---

SOUTH CAROLINA STATE HOSPITAL  
Columbia, South Carolina

Dear Dr. Waring:

I feel constrained to comment to you referable to the editorial entitled "Dancing Mania or Dancing Maniacs", which appeared in the July, 1959, issue of the *Journal of the S. C. Medical Association*.

Frankly, I question the advisability of including

parently all right at birth. Though 109 of these infants died within 48 hours, 16 were more than one week of age.

The cause of death as stated on the death certificate and form presents a disturbing fact for we find that there are listed a number of conditions which should be treatable or preventable. Ninety were stated to be immature with or without atelectasis and asphyxia or with simple asphyxia and atelectasis without immaturity. At the present time we do not know how to cope with this situation other than to prevent immature births. Unhappily there are seven reported as intracranial and spinal injuries at birth, four with other birth injuries without immaturity, four with hemorrhagic disease of the newborn, three with hemolytic disease of the newborn (erythroblastosis), two with pneumonia of the newborn, one with sepsis of the newborn, one with diarrhea of the newborn, one with tetanus of the newborn.

As further summarizations are made, notice of these will be given in the Journal.

---

### THE INSURANCE COMMITTEE

The Insurance Committee of the South Carolina Medical Association, Dr. Clay W. Evatt of Charleston, Chairman, met at the Columbia Hotel in Columbia on Wednesday afternoon, July 15th. The first part of the meeting was devoted to a joint session with members of the South Carolina Committee of the Health Insurance Council, composed of representatives of many of the insurance companies engaged in writing health, accident, disability income and related insurance in South Carolina. Mr. George H. Hipp, of the Surety Life Insurance Company, Greenville, Chairman of the Committee, and about eight of its members were present.

The discussion was devoted to the common problems of the insurance industry and the medical profession, the stake held by each in maintaining the system of free enterprise and voluntary health insurance in the United States and to the areas where co-operation is needed, to improve the capacity of the insurance industry to offer sufficiently broad coverage at reasonable rates to accomplish the desired objective in this field. The importance of maintenance of a high quality of medical care and ethics in underwriting were emphasized, along with the necessity for each group to take an active part in policing its own ranks.

The general situation in South Carolina and the desire to cooperate with the medical profession were discussed by Mr. Hipp and the overall purpose and objectives of the Health Insurance Council were outlined and explained by Mr. Richard J. Eales, Assistant Director of Health Insurance, The Life Insurance Association of America. His headquarters are at the office of the Health Insurance Council in New York City.

Following the Joint Session with the Insurance representatives, the committee went into a business

such material in a professional journal. One major concern pertains to the general tenor and the subtle undertones that pervaded the entire editorial, with its outmoded terminology and resurrection of such relatively quiet corpses as the concept of "maniacs".

The use of music in the treatment of mental illness is admittedly not easy to describe "scientifically" but it is very potent—just as many drugs in general medicine produce excellent results although little or nothing may be known as to the exact mode of action.

The use of the dance is in its infancy but I am sure the author will readily admit the importance of exploring all avenues in according treatment to the mentally ill.

It will be a pleasure to have the author of this editorial visit the hospital, at his convenience, for as long as he wishes. We have a Department of Music Therapy and we shall be more than pleased to enlighten him as fully as possible on the use of such therapies and to let him observe its effect on patients.

Yours very truly,  
William S. Hall, M. D.  
Superintendent

#### NICHOLSON CLINIC

Edgefield, S. C.

August 8, 1959

Dear Dr. Waring:

Please announce in the Journal of the South Carolina Medical Association that I need a young doctor in Edgefield, S. C. to help me in my clinic.

Yours very truly,  
A. R. Nicholson, M. D.

---

## NEWS

---

Dr. W. J. Wilson, a specialist in orthopedics is opening an office in Aiken. Dr. Wilson will be located in the Ram Building on Laurens Street.

A native South Carolinian, Dr. Wilson was born and reared in Abbeville, the son of Dr. and Mrs. J. D. Wilson.

Dr. Wilson graduated in pre-med from Erskine College, then entered the University of Colorado where he received his M. D. degree. He then interned in the New York City hospital after which he was resident physician in the orthopedic hospital at Johns Hopkins, Baltimore, Md. He later had four years of military service with the rank of major.

Dr. Wilson has been certified by the American Academy of Orthopedic Surgeons.

---

#### DR. J. S. JACHNA JOINS VETERANS HOSPITAL

Dr. John S. Jachna has transferred to the Columbia Veterans Hospital as Radiologist from the VA Center, Los Angeles, where he had been serving for the past three years as Resident in Radiology. Before beginning residency training in Radiology, Dr. Jachna was a

Ward Physician at the VA's Tucson, Arizona Hospital.

Dr. Jachna is a native of Wieliczka, Poland. His M. D. degree was received from Jagiellonian Medical School University in Krakow, Poland. His post graduate training included 12 months rotating internship at Jackson Park Hospital in Chicago, Illinois; 16 months rotating residency at St. Mary's Hospital in East St. Louis, Illinois, and 13 months residency in tuberculosis at the Rockford M. T. S. at Rockford, Illinois.

Prior to joining the VA in 1954, Dr. Jachna served as Medical Officer on the Tuberculosis Service at the Glenn Dale M. T. S. in Washington, D. C. for 14 months and as Staff Member in Tuberculosis for 33 months at Cook County Institute in Chicago, Illinois. He was engaged in private practice in Riverdale, Illinois for approximately two years.

Dr. Jachna is a member of the American Trudeau Society and the American Medical Association. He is married and lives in Columbia.

#### PAPERS REQUESTED FOR SCIENTIFIC PROGRAM FOR STATE MEETING

Dr. William H. Prioleau

August 12, 1959

The Scientific Program for the annual meeting of the South Carolina Medical Association, May 18-19, 1960 is now being prepared. The present plan is to have five panel discussions. A number of prominent out of state speakers are being invited to be on the panels. The out of state speakers are also being invited to give papers on a subject of their choice. According to the present plan, there will be sufficient time for several short papers by members of the South Carolina Medical Association. Offerings are invited. It is requested that an abstract of the proposed paper be sent to the—

Committee on Scientific Program

Dr. William H. Prioleau, Chairman

158 Rutledge Avenue

Charleston, South Carolina

#### FORAND BILL PASSED OVER

The House Ways and Means Committee has put aside until next year the so-called Forand bill which is opposed vigorously by the medical profession.

But supporters of the legislation have made clear that they will press for action by Congress next year when politics will be paramount because of the presidential and Congressional elections in November.

The Ways and Means Committee took no action on the legislation after five days of hearings highlighted by the Eisenhower Administration lining up with the medical profession in opposition to it.

Arthur S. Flemming, Secretary of Health, Education and Welfare, told the committee that "it would be very unwise" to enact such a bill. He warned of "far-



reaching and irrevocable consequences." It would freeze health coverage of the aged" in a vast and uniform government system" and would mark the beginning of the end of voluntary health insurance for old persons, he said.

Secretary Flemming later promised to report to Congress early next year on possible alternatives, including Federal subsidies to private carriers of health insurance for the aged. But he took no position on any of the alternatives for the time being.

Summing up the hearings, Dr. F. J. L. Blasingame, Executive Vice President of the AMA, said:

"It was shown that it would be most unfortunate for the federal government to move in for political reasons and attempt in a compulsory fashion to solve by legislation problems which are being thoughtfully considered at the state and local level by the medical profession and other dedicated members of the health team."

Main support for the bill, which was sponsored by Rep. Aime J. Forand (D., R. I.), comes from organized labor. The legislation would increase federal Social Security taxes to finance hospital, surgical and nursing home care for Social Security beneficiaries.

Although this bill has been shelved for the time being by the House Committee, the problems of the aged are being studied by a Senate Subcommittee headed by Sen. Pat McNamara (D., Mich.). The Subcommittee on Problems of the Aged and Aging of the Senate Committee on Labor and Public Welfare has held public hearings intermittently in Washington. It also planned to hold hearings in various other cities.

In his second appearance before the Senate Subcommittee, Dr. Frederick C. Swartz, Chairman of the AMA's Committee on Aging, reported that state and local medical associations "have moved promptly" to make the AMA's six-point "positive health program" for the aged "an effective and workable instrument."

Dr. Swartz said that the problem of financing health services for the aged is "a temporary, not a permanent one" because "each year, more and more of the Americans who are reaching 65 are covered" by voluntary insurance.

From the Washington office of the A.M.A.

#### **MEDICAL COLLEGE TO RECEIVE CHARLESTON COUNTY CHARITY CASES OCTOBER 1**

Charleston county's indigent patients will be admitted to the S. C. Medical College Hospital after October 1 this year.

The statement made yesterday by the Medical Center Steering Committee said that no new patients would be admitted to Old Roper Hospital after this date and that all patients would be moved to the Medical College Hospital after January 1, 1960. The same group announced on May 30 that old Roper Hospital would be abandoned after January 1, 1960.

The decision to abandon Old Roper came after the

accreditation committee of the American Medical Assn. indicated Roper would not be accredited past this year if the old building were still in use.

#### **INTERIM MEASURE**

The transfer of the patients to the medical college will be an interim measure only, according to the committee. Dr. Wilson, as president of the Medical Society which owns Roper, announced last week the Morawetz building would be enlarged and renovated to care for some of the county's indigent patients. He said the work, which would cost some \$400,000, would enable the hospital to house 72 additional patients.

The committee said Charleston County Council has employed a team of hospital consultants to determine the medical needs for the county. A report is expected "in sufficient time for county council to complete plans for a new hospital by September, 1960." The members said it will probably take "several years to complete construction and open a new facility," but that on completion of a county hospital, "all patients housed in Roper and Medical College facilities will be transferred to the county's new building."

#### **SAME CONTRACT**

The contractual arrangement with the medical college will be the same as the county has had with Roper. The county pays \$18 per patient day and will give a guarantee of 33,000 patient days. This proposal is contingent upon approval by the State Budget and Control Board. The county renegotiates the agreement each year and is also responsible for the certifying of indigent patients.

Dr. Wilson said previous plans for Roper expansion would have to be modified. The Medical Society had earlier announced a \$7 million addition to New Roper Hospital. He said the society would have about \$2.5 million left for expansion after completing the renovation of the Morawetz building.

#### **RESEARCH CENTER IS PLANNED AT MEDICAL COLLEGE**

Dr. Kenneth M. Lynch announced on July 31 a projected million-dollar research center building on which construction will begin in 1962 or 1963.

Dr. Lynch, president of the S. C. Medical College said the project is now in the first stages of planning and the location and facilities to be included in the building have not been determined. He said it would be near the Medical College, however.

Dr. Lynch said construction of the building would possibly be financed by private contributions along with matching federal funds. He said sources were now being investigated and that the state will probably be asked to make an appropriation for the project.

The \$1 million figure is based on preliminary estimates of facilities needed and current costs of construction.

Dr. Lynch said the Medical College is carrying on

a research program, supported by grants, costing over \$1 million each year. He said this program required special quarters with special equipment.

Dr. Lynch said that all research except that normally carried on in the hospital laboratories, would be conducted in the new center.

### MANY LICENSED TO PRACTICE MEDICINE IN STATE

The state Board of Medical Examiners of South Carolina has announced that 71 persons have passed the recent board examinations.

All but two of the applicants were graduates of the Medical College of South Carolina.

Here is a list of those who passed:

Earl C. Alford, Spartanburg; George O. Bailey, Greenville; Kendall M. Beckman, Jr., Columbia; William F. Bolt, Anderson; Jesse M. Bozard, Orangeburg; Newton C. Brackett, Jr., Pickens; Mildred E. Bradham, Columbia; William S. Bradham, Anderson; Lucien E. Brailsford, Summerton; Charles S. Brown, Florence.

Also, James R. Burns, Jr., Kershaw; Edward Reave Cathcart, Anderson; Arthur Russell Collins, Union; Charles Pinckney Darby, Jr., Mt. Pleasant; George Lamply David, Jr., Florence; John Ridgeway DuRant, Jr., Charleston; Robert Curtis Ellison, Hartsville; Rudolph Farmer, Jr., State Park; Sidney T. Griffin, Florence; Bertand Victor Gue, Jr., Orangeburg.

Julian A. Hard, Jr., Charleston; Al Boyce Harley, Jr., Virgil Harvey, Jr., St. George; Lucius Weils Heriot, Jr., Columbia; Jake King Holcombe, Easley; Harvey Danner Horne, Denmark; Robert Eaton Hunter, Clemson; Duane Gray Hutson, Hardeeville; William Stanford James, Florence; Horry Heriot Kerrison, Charleston.

Also, Norman Frank Kinsey, Ehrhardt; Jean Baptiste Laborde, Jr., Columbia; Pano Andrew Lamis, Jr., Charleston; James Ernest Lathem, Dacusville; William Franklin Luce, Jr., Columbia; Margaret Hunter McCarthy, Newberry; James Anderson McCarthy, III, Abbeville; Edwin Clyde McGee, Hartsville; James Robert Monroe, Honea Path; Heningham Anne Duell Morgan, Charleston.

Also, Melvin Bond Nickles, Jr., Laurens; Harvey Oberman, Charleston; James Edgar Pennell, Anderson; Frederick G. Phillips, Greenville; David Gordon Pinosky, Charleston; Mack Collier Poole, III, Cross Anchor; Hugh Wilson Riddlehuber, Greenwood; Ted Jones Roper, Pickens; William Edward Rowe, Georgetown; Thomas Clifford Rowland, Jr., Laurens.

Also, James Archibald Sasser, Jr., Conway; John George Setter, Aiken; Samuel Rudolph Shannon, Col-

umbia; John Rutherford Smith, Charleston; Randolph Duncan Smoak, Jr., Bamberg; Stratton N. Sterghes, Greenwood; Charles Neal Still, Greenwood; James Lewis Suggs, Conway; Thelbert Rudolph Suggs, Loris; Joseph W. Taber, Jr., Williston.

Also, Ben Sullivan Tatum, Bennettsville; James Guyton Tippins, Jr., Florence; Paul Benjamin Underwood, Jr., Greenville; Preston Almand Walker, Columbia; John Morris Wallace, Columbia; James File White, Columbia; Steven M. White, Clemson; William Rutherford P. Wilson, Springfield; Lawrence Willis Wood, Jr., Charleston; Joseph Coleman Yarbrough, Jr., Anderson; Frank Watson Young, Hopkins.

The board also announced that the following doctors had been licensed to practice in South Carolina following endorsement in other states:

Drs. Charles H. Adams, Grover, S. C.; Louis Birch, Columbia; Jimmie H. Carpenter, Florence; Ronald Dew, Columbia; Edwin F. Jones, Gaffney; Hugh Oliver Pearson, Jr., Beaufort; Edward Warren Taylor, Jr., Florence.

Dr. Charles D. B. Boette, Charleston, has retired after 35 years as plant physician for the American Tobacco Co. Dr. Boette was one of the first industrial physicians in South Carolina. He is being succeeded by Dr. Joseph L. Goodman of North Charleston.

Luther C. Martin, M. D. announces the association of Gordon T. Wannamaker, M. D., diplomate of American Board of Neurological Surgery, in the practice of neurosurgery at 82 Rutledge Avenue, Charleston.

John R. Harvin, M. D. takes pleasure in announcing that Charles A. James, M. D. will hereafter be associated with him in the practice of pediatrics at 1802 Hampton Street, Columbia, South Carolina.

### AWARDS OF MERIT FOR 1959

Awards of Merit for "outstanding contributions to the preservation and continuance of high standards of medical education" were presented to eleven state societies and three medical organizations during the annual meeting of the A.M.A.

Individuals to receive Awards of Merit include: Francis E. Barse, M. D.; Russell B. Bramble, M. D.; Sebastian J. Carnazzo, M. D.; *James J. Cleckley*, M. D.; Morton L. Dunkin, M. D.; *Daniel W. Ellis*, M. D.; *Robert F. Hagerty*, M. D.; Oscar B. Hunter, Jr., M. D.; Hugh H. Hussey, M. D.; John E. Mahaffey, M. D.; *Harold S. Pettit*, M. D.; *Harold R. Pratt-Thomas*, M. D.; Horace E. Turner, M. D.; and S. A. Wallace, M. D.





# BLUE CROSS . . . BLUE SHIELD



## The Role of the Physician and the House of Delegates

### in The Future of Blue Shield —Russel B. Carson, M. D.

Two New England doctors visited the hospital and asked for a tour. During the tour they asked "How are you getting along with Blue Shield in Florida?" We discussed this for half an hour. They had a good comprehensive plan in their New England state, with a fair fee schedule, broad coverage, and public acceptance. But the doctors felt they had little to do with the plan's development: policies, services, etc.

#### *Interest in Blue Shield.*

This is true in many plan areas. Interest by doctors is growing in the nation and forming a new stage. Florida went through this, and it has paid off. Several facts have emerged:

1. The Profession wants Blue Shield;
2. The Profession wants to take a broad part in Blue Shield affairs;
3. The Profession wants to learn enough to intelligently direct Blue Shield policies;
4. The Profession wants a product they are proud to sell.

The public buys Blue Shield in spite of competition. Fifteen and one-half per cent of West Virginia's, and 16.9 per cent of Florida's population; and as high as 48 per cent of Delaware's, Michigan's, and the District of Columbia's population have Blue Shield. Thirty-nine and one-half million, or 23 per cent, of the U. S. population had Blue Shield in 1957.

The public demanded participation in Blue-Shield to solve socio-economic problems, once the profession accepted prepayment. This followed the general trend in our post-depression economy.

#### *Role of the Physician.*

Public faith in Blue Shield and its physician sponsorship will deter governmentalization. Prepayment and the identification card have replaced the former dun and attempt-to-collect methods. Protecting the public interests in the future is the role of the physician.

#### *Role of the House of Delegates.*

Contracts and fee schedules are old methods dating back to China. In India a physician healed a priest for a benediction; a governor for four camels; a mayor for a bull, etc. Feudal lords gave annual salaries to doctors caring for servants.

In the United States, prepayment began seventy years ago in lumber and mining companies having many workers in remote areas. Doctors were paid by the number treated.

#### *Medical Bureaus.*

In the Northwest "Medical Bureaus" had jurisdic-

tion over most medical care of workers in the 1920's. Many were organized by Medical Societies who contracted and furnished free choice of participants. In 1939 the first Blue Shield type plan was established in California with funds advanced by the California State Medical Association. High usage caused deficits, and enrollment was low. The participating physicians lowered fees and stabilized finances. This experience, repeated later in other states, pinpoints an important feature of doctor-sponsored plans; i. e., accepting responsibility to subscribers by the profession. This differs from a contract practice. We should recognize the difference between what we sponsor in Blue Shield and a third party commercial insurance associate, or a social security suicide of free enterprise medicine.

We've developed Blue Shield's genealogy. Let's see what a Blue Shield plan actually is. "Blue Shield"\* is a service mark and a registered symbol, familiar to millions of Americans as a specific product. This is a most valuable product, but needs improvement.

The public expects an advertised article to be standard in quality, available, and with a guarantee of service. Do we have all these things? Can a similar contract be bought in any state? This alone would solve many problems.

In 1946, AMA developed "Standards of Acceptance for Medical Care Plans," and offered a "Seal of Acceptance" to sponsored plans meeting the standards. In 1954 this was abandoned and maintained only as a guide for plans.

#### *Revision of Standards.*

Revised "Standards" were submitted to AMA in 1958. These "Suggested Guides for Medical Society Sponsored Voluntary Prepayment Medical Benefit Plans" relate to broad objectives: benefit structures, performance in public interest, and relation of the profession to plans. The main objectives are:

1. Provide public an economic method to meet medical costs by providing on sound financial basis physician services or high proportion of most of services;
2. Support the best standards of medical practice of a professionally qualified, independent medical Profession.

Therefore, AMA, though not calling Blue Shield by name, has set forth guides for medically sponsored voluntary prepayment medical benefit plans (at least we're not called "insurance companies").

These guiding principles should be adopted by the House of Delegates of all state associations as the basis for any sponsored plan.

At Blue Shield's 1958 annual conference, a studying

\*Registered



committee gave recommendations concerning "essentials of plan structure and organization":

1. A Blue Shield plan should give the profession controlling voice in medical policy in composing boards, committees, terms of office, fee schedules, setting disputes relating to payments, and procedure of professional relations;
2. Counterbalancing its controlling voice, the profession should recognize and accept responsibility for the Plan—maintaining its reputation, supporting objectives and fostering good public relations;
3. Plan should strive to increase scope of services, to provide as broad a range as the profession will tender through the plan.
4. Plan should keep pace with area's economy, staying flexible enough to keep services available to bulk of people.

We've considered AMA's guides and the essentials of Plan structure of Blue Shield. Now, where does the State House of Delegates fit in? Medicine is practiced almost the same in each state, though each has its own local problems. The dissimilarity between growing apples and mining coal is no greater than growing oranges and mining yankee dollars. Basic prepayment plan precepts are the same for everyone. Standards of care, coverage, and service benefits should be set by local doctors; but the subscribers must be satisfied, too. Local ground rules vary, but autonomy must exist everywhere. You should decide such things as: the degree of trusteeship control, whether to sponsor partial or complete coverage, a high or low income ceiling, etc. These are your problems.

But for strength, unity must prevail—"E pluribus unum."

The role of the House of Delegates, as representatives of the Profession, should be basic policymaking. Certain established principles should guide the House of Delegates, which:

1. Provides the sponsorship of Blue Shield;
2. Has controlling voice in all medical matters, through control of the trustees responsible for the Plan's operation;
3. Determines scope of benefits;
4. Determines limits of service benefits;
5. Determines who shall be participating members;
6. Actively supports the plan and considers it an integral part of organized medicine;
7. Maintains means to provide equal care to subscribers as to non-subscribers;
8. Maintains active advisory committee on voluntary prepayment plans to assist in contract development, fee schedule revisions, professional and public relations;
9. Take steps to protect the profession and the plan from abuse by subscribers of non-participants.

#### *Summary.*

In summary, then, the role of the individual physician must be to again be an integral, interested, co-operating part of the idea of the Blue Shield phil-

osophy. Each physician must learn what Blue Shield is; Blue Shield must provide this information.

The doctor must learn the needs of the subscriber to help solve problems. Our socio-medico-economic lives are changing. Blue Shield must also change and the participating physician must guide and control its interests.

The House of Delegates must know the wishes of the public and the physician. It must provide rules, principles, and sponsorship. Medical policy control must rest in its hands.

Corporate affairs and control must rest in the hands of the trustees.

This state's medicine is best served by a single strong Blue Shield plan having state sponsorship, a single controlling body, the elimination of competition in a non-competitive, non-profit field. This would eliminate confusion of the subscribing public.

Medical sponsorship must be real; medical approval must be active; and medical control must be genuine and tangible, if Blue Shield is to be truly the "doctors' plan."

---

---

## DEATH

---

---

### DR. E. B. GAMBLE

Dr. E. Beasley Gamble, 72, died recently in a Sumter hospital after a few hours' illness.

Dr. Gamble was graduated from Turbeville High School and attended Shenandoah College in Virginia two years after which he went to the Medical College in South Carolina and was graduated in 1911.

He practiced medicine in the New Zion-Turbeville community since graduation and was on the staffs of the Clarendon Memorial Hospital in Manning, the Tuomey Hospital in Sumter and the hospitals in Florence. He was a member of the county and state medical associations.

---

---

## ANNOUNCEMENTS

---

---

### SOUTHERN MEDICAL ASSOCIATION

#### 53RD ANNUAL MEETING

Atlanta, Georgia, November 16, 17, 18, and 19, 1959

---

Duke University Regional Center for the Study  
of Aging

Durham, N. C.

### FIRST ANNUAL CONFERENCE ON GERONTOLOGY

November 19, 20, 21, 1959

# **MEDICAL COLLEGE FOUNDERS' DAY SEMINAR AND SYMPOSIUM AN INFORMAL PREVIEW**

Encouraged by some favorable comments on last year's program, the 1959 Founders' Day Seminar and Symposium at the Medical College of South Carolina will lead the participants into a more intimate experience with the working of the college and the Medical College Hospital. While many presentations will require Simon Baruch Memorial Auditorium, much of the program has been designed to take place in departmental conference rooms, laboratories and the hospital amphitheater.

The program begins Wednesday, November 4th, extends through Founders' Day and ends midday Friday, November 6th. If necessary, participants can leave midday on Friday, but for those who wish various recreational opportunities will be provided such as visitors' permits to the Charleston Country Club.

Founders' Day banquet will be held on Thursday evening and efforts will be made to provide some relaxation as well as serious considerations.

Wednesday morning will be devoted to considerations of Pediatrics. Dr. Gilbert Young will conduct a demonstration and discussion of experiences in the Child Development Clinic. Dr. Mitchell Rubin, Professor of Pediatrics at Children's Hospital, Buffalo, New York, whom everyone in South Carolina knows and who is a distinguished alumnus of this medical school, will discuss aspects of renal disease in children, a subject on which he is a well known authority. Following Dr. Rubin's presentation Dr. John R. Paul will conduct a Pediatric Clinic.

After lunch on Wednesday, a program which has been designated "Glimpses of Research" has been organized. The purpose of this presentation is to provide opportunity for those in attendance to go into the laboratories in which research projects are in progress and there in an informal fashion discuss the principles involved and the results obtained.

On Thursday, November 5th, the program will begin at 8:15 A. M. in the hospital amphitheater with the Graduate Cancer Conference under the direction of Dr. John A. Hawk. At 10:00 o'clock, Drs. Lawrence L. Hester and E. J. Dennis will discuss and demonstrate principles of the vaginal approach to gynecology. Dr. John C. Weed, Associate Professor of Obstetrics and Gynecology at Tulane, will discuss Out-patient Gynecologic Diagnosis. This will be followed by a demonstration of laboratory methods and bone-marrow evaluations in certain of the blood dyscrasias by Drs. D. W. Ellis and Albert Cannon.

Thursday afternoon, Dr. Joseph Hughes, Professor of Psychiatry at Woman's Medical College of Pennsylvania, will discuss the concepts of psychosomatic medicine. Following Dr. Hughes' presentation, Dr. John A. Boone will present some functional cardiac states and Dr. Wendell Thrower will discuss surgical cardiovascular therapy.

On Friday morning, Dr. Cheves Smythe will dis-

cuss some of his investigations into metabolic diseases of the liver. This will be followed by Dr. John H. Moyer, Chairman, Department of Internal Medicine, Hahnemann Medical College in Philadelphia, who will discuss some metabolic aspects of hypertension. The final formal presentation will be by Dr. John Buse who will present and discuss some interesting cases of tumor of the adrenal glands.

The final roundup will be a question and answer period.

## **SUGGESTED PROGRAM**

### **11TH ANNUAL SCIENTIFIC ASSEMBLY SOUTH CAROLINA ACADEMY OF GENERAL PRACTICE**

**OCTOBER 1st and 2nd, 1959**

**THURSDAY, OCTOBER 1, 1959**

8:00 a. m. Registration

9:00 a. m. Welcome

9:30 a. m. THE PRACTICE OF OFFICE GYNECOLOGY:

Dr. Luther Talbert, University of North Carolina

10:30 a. m. COMMON AND UNCOMMON SYMPTOMS OF ANGINA PECTORIS:

Dr. R. Bruce Logue, Emory University

11:30 a. m. LOW BACK PAIN AS A PROBLEM IN GENERAL PRACTICE BEFORE AND AFTER CONSULTATION:

Dr. Lenox D. Baker, Duke University

12:30 p. m. Question and answer period for morning speakers:

Dr. Talbert, Logue and Baker

1:00 p. m. Luncheon with Wives

AMERICAN vs. ENGLISH SYSTEM OF MEDICAL PRACTICE:

Dr. John B. Reckless

2:30 p. m. THE PREVENTION AND TREATMENT OF TOXEMIA OF PREGNANCY:

Dr. Luther Talbert

3:30 p. m. FRACTURES AND RECOMMENDATIONS FOR THEIR OFFICE CARE:

Dr. Lenox D. Baker

4:30 p. m. NEW DRUGS IN HYPERTENSION:

Dr. Bruce Logue

5:30 p. m. Question and answer period for afternoon speakers:

Drs. Talbert, Baker and Logue

7:00 p. m. Cocktails

8:00 p. m. BANQUET

Dr. Fount Richardson, President, A. A. G. P.

**FRIDAY, OCTOBER 2, 1959**

8:00 a. m. Registration

9:00 a. m. ILLUSTRATIVE CASES — GIVING EARLY SIGNS, SYMPTOMS AND TREATMENT OF HANDICAPPED CHILDREN AND WHAT SOUTH CAROLINA HAS TO OFFER IN CARE OF THESE CHILDREN:

Dr. Gilbert F. Young, Medical College of South Carolina



10:00 a. m. OFFICE PSYCHIATRY IN GENERAL PRACTICE:

Dr. Sam R. Kilgore, Spartanburg, S. C.

11:00 a. m. THE OFFICE NEUROLOGICAL EXAMINATION (demonstration):

Dr. Rhett Talbert, Medical College of South Carolina

12:00 p. m. Luncheon with Wives

BEHAVIOR PROBLEMS IN CHILDREN, ESPECIALLY ADOLESCENCE:

Dr. Sam R. Kilgore

1:30 p. m. NEURITIS—AN OFFICE PROBLEM AND ITS TREATMENT:

Dr. Rhett Talbert

2:15 p. m. IS THE FUTURE OF PREPAYMENT PAST?

Mr. Wm. A. Sandow, Blue Cross-Blue Shield

3:00 p. m. Question and Answer Period:

Drs. Young, Kilgore, and Talbert

Dr. John Cuttino—Moderator

3:30 p. m. Short Business Meeting while your wife packs.

Drawing of Door Prizes—You'll have time to get home.

### AMERICAN COLLEGE OF CARDIOLOGY TO MEET WITH HEART ASSOCIATION

This year for the first time the American Heart Association's annual Scientific Sessions, to be held in Philadelphia, October 23-25, will include a joint program with the American College of Cardiology. The College, holding its 8th Interim Meeting concurrently, will conduct "Fireside Conferences" on Friday evening, October 23, in which Heart Association members will participate. On Sunday afternoon, October 25, a panel on "Cardiac Resuscitation" will be presented jointly by the College and the Association's Council on Clinical Cardiology.



*Mountainview, Inc., Spartanburg, S. C.* An 81-bed nursing home owned by the County of Spartanburg and leased to a non-profit chartered organization, opened for patients in 1957. Structure was converted from a county home into a nursing home financed partly with Hill-Burton funds (Public Law 482). Total cost of the project \$193,714.77.

Architect: W. M. Hudson, Spartanburg, S. C.

General Contractor: Fiske-Carter Construction Company

Photo by: E. S. Powell, S. C. State Board of Health.



*Spartanburg Mental Health Clinic, Spartanburg, S. C.* An out-patient clinic building constructed under Public Law 482 (an amendment to the Hill-Burton Program) and completed in 1958 at a cost of \$50,000. Architect: W. M. Hudson, Spartanburg, S. C. General Contractor: W. G. King & Sons, Clinton, S. C. Photo by: E. S. Powell, S. C. State Board of Health.



*Cherokee County Memorial Hospital Nurses' Training School, Gaffney, S. C.* A training school constructed under the Hill-Burton Program (P. L. 725) and completed in 1957 at a total cost of \$199,989.54. Architect: Walter Hook & Associates, Charlotte, N. C. General Contractor: Laxton Construction Co., Charlotte, N. C. Photo by: E. S. Powell, S. C. State Board of Health.

### OPHTHALMOLOGISTS MEET

The ninety-fifth annual meeting of the American Ophthalmological Society was held at the Homestead, Hot Springs, Virginia, May 28-30, 1959. As usual, the program was excellent and the fellowship never to be forgotten. We enjoyed as our distinguished guest Sir Stewart Duke-Elder, that gracious, affable, and competent Englishman, of whom all have heard. What interested me a great deal was the splendid work coming out of our Southern institutions. Dr. L. Benjamin Sheppard from Richmond, Virginia presented original work on the intrascleral drainage channels of the normal rabbit eye. This provoked quite a bit of discussion and was well received. Dr. DuPont Guerry, III, also from Richmond, gave his experiences with light coagulation of fundus lesions, a very new and interesting mode of treatment. Dr. Fred W. Stocker of Durham, North Carolina presented original work on the long term preservation of donor tissue for corneal grafting. He found the optimum storage temperature for this to be -45° C. Dr. F. Phinzy Calhoun, Jr. told of his experiences with the Barraquer method of extracting the dislocated lens. Dr. Calhoun has his own modification of the double needle to hold the lens forward during surgery. An outstanding contribution was from Dr. Angus L. MacLean and Dr. A. E. Maumenee of Baltimore. Hemangioma of the choroid was described and interesting points made in differential



diagnosis. This paper was very helpful and promoted a great deal of discussion. Dr. Harvey Thorpe of Pittsburg recorded his experiences in 40 cases of cataract extraction with the aid of the enzyme chymotrypsin to dissolve the zonule. This method is helpful in young persons where the zonule is tough, but need not be routinely used. One of the most interesting things on the program was a motion picture of the human retinal vessels by Dr. Kenneth C. Swan of Portland, Oregon. This was an amazing photographic study of the pulsating vessels in the fundus. Dr. C. Wilbur Rucker from Rochester, Minnesota had a perfectly beautifully illustrated lecture on the pathogenesis of paralysis of the third cranial nerve. This material had been prepared in the usual excellent and meticulous manner for which the author is well known. Space does not permit a complete summary of this meeting. The annual transactions will contain all papers presented, and also the valuable theses of several new members.

J. W. Jervey, Jr.

### THE REVISED POLIO PATIENT AID PROGRAM

The New Patient Aid Program for polio victims was written with the benefit of over twenty years of experience in aiding victims of this disease. The aim of those who were involved in its formulation was to continue the finest traditions of the past program and to discontinue any parts of the program which were felt to be meaningless, too involved in expense for good done, or no longer for the benefit of patients. The new program, it was decided, must concentrate the resources of The National Foundation upon those patients with whom productive medical progress could be attained. After no more medical advancement is possible, the problems of the patient are living problems; and our limited resources cannot be used merely to support custodial, long-term patients. This, it is felt, should be a family, community, or a governmental problem. The resources must go where they can do the most creative good.

*The new program continues* all of The National Foundation's basic responsibilities to those with paralytic polio, concentrating attention on the most severely involved. Of primary concern are those in the group of Priority Patients, which consists of the young (under 19) paralytic polio victims, the most severely paralyzed, and those with respiratory involvement. Into this group will fall all or most of

those for whom chapters have been providing aid recently. The other group is the new patients, those paralytic polio patients who are eligible for aid up to two years after the onset of disease.

*The new program encourages* maximum and prompt recovery of paralytic polio victims by concentrating resources on them and by discouraging long-term hospitalization. Prolonged hospitalization is now discouraged as detrimental to the recovery of the patient. Much more stress is put on home care with the objective of stimulating independence, preventing invalidism and providing psychological motivation for speedy recuperation.

*The new program encourages* a more active role for Chapter Medical Advisory Committees by requiring their consideration of many cases in order to determine their status.

*The new program encourages* families to assume those expenses of the treatment of polio which they can without hardship. This promotes interest and responsibility on their part.

*The new program discontinues* payment for "suspect polio" cases. This payment has become less meaningful through the years due to increased hospitalization insurance, better hospital facilities, and improved diagnostic techniques.

*The new program discontinues* payment for non-paralytic polio patients. Almost by definition, these are polio cases which recover, so that aid for them achieves no progressive result.

*The new program discontinues payment* for medical and surgical fees to physicians. Payment of such fees involves fee schedules and other interferences with the doctor-patient relationship which are objectionable to physicians. This revision in policy was suggested by the medical profession. In the past, this has been optional with chapters and many have never paid these fees.

*The new program places limits* on hospitalization, special duty nursing, home attendants, and physical therapy. This is considered medically sound. Over-hospitalization can increase invalidism; special duty nursing service over an extended period should be included in the per diem rate of hospitals; home attendants over an extended period have no productive result in the progress of the patient; physical therapy, in order to be effective, must be supervised by the attending physician and organized through local institutions. In each of these fields the limits are still adequate, and in no case will they interfere with the patient's progress toward recovery.



# ONE HUNDRED AND ELEVENTH ANNUAL SESSION SOUTH CAROLINA MEDICAL ASSOCIATION HOUSE OF DELEGATES

MAY 12, 13, 14, 1959 — COLUMBIA HOTEL — COLUMBIA, SOUTH CAROLINA  
DR. R. L. CRAWFORD, Presiding

(Continued)

THE CHAIR: Thank you Dr. Edwards, I will refer this report to the reference committee on Public and Industrial Health.

The next report will be that of the Scientific Committee. In the absence of Dr. Mayer, Chairman, I will ask Dr. William Weston to give the report.

DR. WILLIAM WESTON: Mr. President, fellow delegates,

"The Scientific Program Committee has been very fortunate in securing some of this country's leading men to appear on the program. Topics of general interest were selected which would also particularly represent special groups. Two panels and a C.P.C. were included because of the enthusiastic reception of them by the membership in the past.

Fifteen different speakers appear, some more than once. Nine are members of the Association. The Crippled Children Society of S. C., and the American Cancer Society of S. C. are each sponsoring a speaker. The President of the Association requested that the Committee also secure a banquet speaker. The distinguished President of the A.M.A., Dr. Gundersen, was secured. His appearance will be a highlight and fitting climax of the meeting.

A trend seems to be developing for departmental or sectional programs at the state meeting in addition to the general sessions. This may not be too far distant.

We believe the Scientific Program offers a great deal and no doubt will be well attended, which will indicate to the speakers appreciation for their valuable contributions. We are particularly grateful to the out-of-town speakers for their part in the Program.

Scientific Program Committee:

Dr. Edward R. Barber  
Dr. George H. Bunch  
Dr. R. L. Crawford, Ex-officio  
Dr. Edmund Taylor  
Dr. William Weston, Jr.  
Dr. Robert Wilson, Ex-officio  
Dr. O. B. Mayer, Chairman

THE CHAIR: Thank you, Dr. Weston, we will refer that report to the Reference Committee on Miscellaneous Business.

The next is the Report from the State Board of Medical Examiners, Dr. George Wilkinson.

DR. GEORGE R. WILKINSON, Greenville: Mr. President, Members of the House of Delegates:

"The State Board of Medical Examiners met at its regular sessions on June 24th and December 9th, and called a meeting in May of that year, and also a meeting on July 23rd for tabulation of grades from the June examinations—there was one failure.

In 1958 the Board licensed 59 physicians by written examination and 32 physicians by endorsement of credentials. During the year 49 Temporary Permits were issued and there were 29 physicians certified to other states. There were 2 requests for duplicate licenses.

The present terms of Dr. K. D. Shealy (2nd District) and Dr. Roderick Macdonald (5th District) expire this year.

At the regular meeting in June, the Board held hearings for 8 physicians charged with narcotic violations. In December, 6 more cases were heard. From these hearings, four licenses were revoked and one was suspended (the suspension was stayed and the physician placed on probation, and one of the revoked licenses has been re-instated.

There have been additional cases which were investigated during the year. In the majority of these the evidence was insufficient for the Board to take any action, or, the laws of the State of South Carolina did not provide for the Board to act. In this regard, it should be noted that in the future small changes in the law will probably be necessary to permit the Board to act more efficiently and to handle matters which at present it is unable to do.

This year the Board is requesting the House of Delegates to endorse biennial registration of physicians. This matter was presented to Council at an earlier date and was approved. It was also presented to the House of Delegates last year and referred to the Committee on Public Policy and Legislation for their investigation and recommendation. As you will note from their report, they have recommended it to you for approval. The Board feels this is highly necessary for efficiency of operation, and we urge you to support this recommendation." Thank you.

THE CHAIR: Thank you, Dr. Wilkinson. This report will be referred to the Reference Committee on Legislation and Public Policy.

The report of the State Board of Health has already been made.

Is there any unfinished business?

Is there any new business?

If none, I will declare this meeting of the House of Delegates adjourned. Immediately after this there will be a meeting of the Blue Shield Corporation.

## SPECIAL ORDER THE ANNUAL MEETING OF THE CORPORATION OF THE SOUTH CAROLINA MEDICAL CARE PLAN.

Dr. G. D. Johnson, President

May 12, 1959, 4:30 P. M.

THE CHAIR: I now declare the annual meeting of the Corporation of the South Carolina Medical Care Plan in order.

Since the proceedings of the last annual meeting of the Corporation have been published in the South Carolina Medical Association Journal they will not be read again, unless someone so requests. Hearing none, I shall proceed with the order of business.

(President's Report read.)

THE CHAIR: I would like to call on Dr. Cathcart Smith at this time if he has anything he would like to add.

(After Dr. Smith made a part of his report it was determined that there was not a quorum present and The Chair declared a recess until 9:30 A. M., May 13, 1959.)

(Recess taken)



May 13, 1959, 9:30 A. M.

DR. CRAWFORD, Presiding:

DR. MAYER (Recognized by The Chair:) Mr. President, I am glad to announce that a quorum is present. THE CHAIR: The House of Delegates will please come to order.

At this time I owe Dr. Johnson an apology for so rapidly adjourning the House of Delegates yesterday afternoon and he did not have a quorum left to conduct the business of the Corporation of the South Carolina Medical Care Plan, therefore, that will be the first order of business today, Dr. Johnson.

DR. GEORGE DEAN JOHNSON: Thank you, Mr. President.

(Dr. Johnson takes the Chair.)

DR. JOHNSON, PRESIDING: I now declare the Annual Meeting of the Corporation of the South Carolina Medical Care Plan in order.

For those faithful souls who did stay yesterday afternoon, I want to ask your indulgence because I think I will have to read the part I read yesterday.

Since the proceedings of the last annual meeting of the Corporation have been published in the S. C. Medical Association Journal they will not be read again unless someone so requests. Hearing none I shall proceed with the order of business.

First, every doctor in South Carolina should be interested in the welfare of the Medical Care Plan and I am happy to report that financially the plan is in good condition. We have reserves sufficient to operate and pay all claims for about four months. While the aim is not to make money it is desirable to lay away a certain amount for emergencies. The Buffalo Plan, over a period of twenty years, saved up one million dollars. It has all been dissipated in seven and one half months due to high payments, rising utilization, and refusal on the part of the state insurance commission to grant an increase in premiums. On January 1st, in keeping with the purpose of the plan, benefits were increased to subscribers and payments to physicians were increased by 12½%. Your Board of Directors will continue this policy whenever possible.

The number of physicians participating is greater than ever before. Over 1000, or slightly over 80%, of the practicing physicians in the state are participating. Maryland with 98% of its physicians participating is our standard to aim at. Our increase is due in large measure to a better understanding of what Blue Shield is trying to do and also to Mr. Bob Tomlin who for the past year has been our professional relations man. He has done and continues to do an excellent job. Most of his work is explaining to physicians how Blue Shield operates; what it can and cannot do. We regret that it was necessary to move him from the sales department to professional relations because he was our best salesman. His accomplishments have been very worthwhile.

Our sales of policies last year did not show much of a net gain. This was due partly to the recession, all insurance sales were off, and partly to commercial competition. We feel that Blue Cross-Blue Shield has a special product to sell and despite other factors our sales will continue to rise. At present somewhat over 6% of the population is covered by Blue Shield. Contrast this with 48% for Michigan and it's easy to see we have a good way to go yet. Our largest industry, textiles, has not been cracked yet for the simple reason that the employees are apparently satisfied with an indemnity type plan which pays part of the hospital cost, a little casualty, a little death benefit, and indemnity for surgery and usually nothing for medical care. As one textile man whose company has 12,000 employees put it: "I have Blue Cross-Blue Shield myself because I know what they do, but as long as our employees are content we see no reason to change".

The most important single thing that you as incorporators can do today is approve the plan outlined by the Central Professional Committee acting for the Board of Directors. Since last June when Dr. Leonard Larsen, Chairman of the Council of the A.M.A., stated that he would dedicate all the efforts of the A.M.A. to the planning of approved methods whereby people over the age of 65 would be taken care of by physicians without the intervention of the Federal Government, plans all over the nation have been at work trying to work out fees acceptable to the medical profession at premiums that oldsters could afford. Forty-five states have plans varying in stages of development from nothing to complete operations such as Massachusetts and Iowa.

It might be well to take a glance at the problem. Only about 8% of the population in the United States at present is over 65. What the percentage in South Carolina is we do not know but in Nebraska about 30% can pay regular fees, about 30% can pay nothing and only the remaining 40% or about 3% of the state population is involved. Numerically and percentage wise this number is not too important, but politically that 3% is very very important. The efforts of all the plans are to come up with a better solution to the medical care of the oldsters than payment by the Federal Government.

Another point that is important, surgery in oldsters is much less and medical care is about three times greater than in younger people. Stay in the hospital averages longer, also. Most physicians charge less to old people who fall in the income class that this policy will cover.

The South Carolina Committee on Aging, a joint meeting between a special committee of the Blue Shield Medical Care Plans and the committee on Insurance and Prepayment Plans of the A.M.A. Council on Medical Service have recommended the following benefits which could be provided with reasonable premium rates to those over age 65 on a service basis.

- A. Surgery wherever performed
- B. Anesthesia
- C. In-hospital medical care
- D. Diagnostic x-ray in the hospital; in the hospital out-patient department or doctor's office if hospitalization follows
- E. Radiation therapy

This committee emphasized that if such a program were to be effective nationally, there should be if possible a high degree of uniformity of elements of coverage throughout the entire country.

The Board of Directors of the South Carolina Medical Care Plan discussed this program at some length and requested the Plan's staff to submit the nationally recommended pattern of benefits and, as well, determine a level of compensation for services rendered which would produce a premium charge within the means of these people. The Board took cognizance of the fact that the national committee had recommended a premium charge which should be in the neighborhood of \$1.75 and \$2.25, depending on utilization and the medical practice of the local area.

The Plan staff, following this directive and using the current relative value fee schedule, found that placing a \$1.50 unit value on surgery and providing for in-hospital medical care on the basis of \$5.00 for the first day, \$3.00 per day for the next 19 days, and \$2.00 per day for the remainder of the admission would produce a rate per person under this contract of \$2.45 per month.

The entire contract and fee schedule were reviewed by the Central Professional Service Committee of the Board and recommended for adoption with income ceilings of \$1500.00 single and \$2500.00 husband and wife.

It was the desire of the national committee, as well



as the local committee, to encompass all benefits of the contract as service benefits within the above ceilings. Since, however, the program encompasses certain services that have heretofore never been on this basis, it was recommended that further work may be necessary to arrive at acceptable fee schedules for these items. It was also recommended that the same restrictions concerning service benefits apply on this contract as apply in the standard Blue Shield contracts. (That is, if a person 70 years old is in the hospital and his income is \$1500.00 a year and his children want to put him in a private room and get private duty nurses, then the doctor should feel free to charge his regular fee.)

The South Carolina Medical Care Plan Board of Directors hopes that all concerned will give earnest consideration to implementing the above program which will carry out the intent of both the A.M.A. House of Delegates and the local Committee on Aging in regard to prepayment coverage for the aged. (Interrupting reading of report)

Now, at this point I wonder if we can't get into a detailed discussion of this contract. I would like to hear a resolution or a motion to the effect that it be adopted, or if you think further study is needed we will refer it back, but we hope that you will approve it as it is. A great deal of work has gone into it and a great deal of study has gone into it. Understand that we certainly hope that anesthesiology and radiology both will come in on a service basis on this most important thing that has come up in A.M.A. in the last five years. Do I hear a motion?

DR. PRIOLEAU (Recognized) I make such a motion, that it be adopted.

(This motion was seconded by Dr. Cain, there was no discussion, the vote was taken and was unanimously carried.)

THE CHAIR: Thank you so much, it is so ordered. (Continuing his report.)

There are definite trends in the Blue Plans. Nationwide there is a strong desire for more complete medical and surgical coverage. The daughter of a friend in Florida had an appendectomy. Her bill was \$800.00. The Blues covered only \$200 to \$300. The father is willing and anxious to pay more monthly and get more complete coverage. A nurse in a hospital pays for her mother-in-law's coverage. At the last hospital admission of this lady the nurse and her husband had to dig up \$60.00 to pay the difference between what the Plans paid and the hospital and doctors' bills. The nurse said she and her husband had rather pay more quarterly and have nothing extra to pay when someone is sick. On the other hand, the higher premiums are raised to accommodate people like that the harder it is to sell. Certain plans are experimenting with office calls, diagnostic x-rays up to a certain amount, and in some instances home calls and major medical. It is obvious that to please so many different requests a plan should have many different contracts or options that might be added. The Arizona Plan attributes its 15% growth last year to its multiplicity of contracts. As your plan grows, the chances are our subscribers will be offered varying programs.

As far as doctors are concerned, your Board realizes that costs have gone up. It is obvious that doctors must have larger payments if they are to keep pace with the effects of inflation. Every effort will be made in the future to increase payments to physicians as well as to increase benefits to subscribers.

There is still another tendency among the people who pay the bill,—that is to raise the family income to a higher level and still allow a service basis. Where this is done naturally a fee compatible with that income level must be paid the doctor.

At the national meeting at Miami Beach there was

much talk about utilization. It is a nationwide problem. The southeast has one of the highest utilization rates. Doctors cannot completely control it, but they can come nearer than anyone else. The higher the utilization, the lower the payment to physicians and the higher the premium to the subscriber. That is something that all of us must watch as carefully and as conscientiously as possible.

You will be interested to know that a new physicians claim blank has been approved by the Central Professional Committee. It is simpler to fill out than the previous one and we hope will meet with your approval. The administration staff has asked for only the information it feels essential for the proper processing of your claim. I doubt if we shall ever reach that utopian state where the doctor can put down the name of patient, age, disease, days in hospital, his fee, and his name, but that is what we are working towards.

Your Board of Directors has been faithful in attendance at meetings and in carrying out committee assignments. This is especially true of the Central Professional Committee whose duties are numerous. I would also like to thank especially the lay members of our board who came to our meetings on Sunday afternoon every three months to help physicians in the community effort called Blue Shield. Their advice and comments have been most helpful. We regret that during the past year Mr. Graham Segars of Hartsville was forced to resign because of the press of personal business. We added to our Board last year Mr. T. C. Vandiver of Columbia, an official in the South Carolina National Bank. The terms of a number of directors end this year and we require the nomination of a layman to fill the unexpired term of Mr. Segars. At this point I would like to call on Chairman of Council, Dr. Joe Cain to read his committee's list of nominees. Dr. Cain.

DR. J. P. CAIN: Mr. President, Members of the Corporation, according to the By-Laws of the S. C. Medical Care Plan vacancies on the Board of Directors are filled by election from this corporation on nomination from the Council of the S. C. Medical Association. I am going to read to you a list of nominees for the vacancies. If you do not wish to elect any of these nominees, you can fail to elect them, however, you will not be privileged to nominate someone from the floor to take their place since the By-Laws require nominations be made by Council. If any of these nominees are not elected, further nominations will be given you from Council at another time. To those members of the Board of Directors whose terms have expired and are nominated to succeed themselves:

Mr. Frank S. Adams  
Mr. Wilton F. May  
Mr. M. L. Meadors  
Dr. John Arthur Sieglings  
Dr. Wyman King

To fill the unexpired term of Mr. Graham Segars and to serve until 1961, Mr. Dill B. Ellis of Dillon and Dr. W. West Simmons, of Greenville.

THE CHAIR: Thank you Mr. Chairman.

Do I hear a motion to approve these nominees or would you like to vote on them separately?

DR. WESTON: I move that the entire slate be elected.

(This motion was seconded, there was no discussion, the vote was taken, passed and it was so ordered.)

I would like to state that the President of our association, Dr. William Weston, Jr., and Chairman of Council, Charles N. Wyatt, M. D., will serve ex-officio on this Board of Directors.

(President continuing his report)

In conclusion I want to thank Mr. Sandow and his staff, Mr. Dave Dick, sales manager; Con Starin, ac-

countant; John Alexander, office manager; Bob Thomlin, professional relations man, and all the other staff members for the excellent work they have done in the past year. I want to urge all physicians in South Carolina to continue their efforts to develop Blue Shield. It is the Doctor's Plan, and it still remains the best bulwark against Federal Intervention." (Applause)

THE CHAIR: Now, there is one other thing that I want to place before you and that is a resolution—this is a matter of form, it states in our Charter the place of business shall be Greenville. We have been operating in Columbia for a number of years and we would like a motion changing the place of business from Greenville to Columbia.

That has to be advertised thirty days and then if it is approved by you corporators it will be changed on the Charter. Do I hear a motion.

DR. JAMES R. YOUNG (Recognized) I so move. (This was seconded by Dr. Smith and others, there was no discussion, the vote was unanimous and it was so ordered.)

THE CHAIR: Thank you very much. At this time we will have the report of Mr. William Sandow, Executive Director of Blue Cross-Blue Shield, Mr. Sandow.

MR. SANDOW: Dr. Johnson, and gentlemen, I am once again honored and privileged to appear before you as Executive Director of the South Carolina Blue Shield Plan. As you probably have noticed the past three or four years, the length of my report seems to have been in proportion to the difficulties with which the Plan has been faced, so I am certain you will be happy, both in terms of the hour and also because of what it implies, that my report this time is very, very brief. This, however, does not mean to say that we are without concern. We are deeply troubled on several counts, and I should like to touch briefly on two if them.

One is the lack of growth in membership in both Blue Cross and Blue Shield in South Carolina. I think it should be recognized that these Plans are nothing in and of themselves but are merely mechanisms for the accomplishment of an objective. That objective, of course, is the prepayment of services attendant to health care. To the degree that the community uses these mechanisms, only to that degree are the Plans successful and effective. To the degree that they are not used, also to that degree do I question the adequacy of the distribution of or the payment for health care. I would like to point out that in this questioning I do not consider commercial insurance a factor for it is not and never will be adequate to the task. As a matter of fact, I think that this is particularly true in South Carolina, for the commercial insurance that seems to be most prevalent, and I am speaking benefit-wise, insults the term protection. As a parenthetical thought, I think that I should add that the amount of money that these companies siphon off daily in the form of profit, money which should be going in payment for the health care of our citizens, is tragic. So my first concern is the extension of membership.

My second concern is the expansion of benefits. This subject has many facets but its basic problems are rooted in cost, and as you know, cost has been ever upward. We have been forced each year to raise our dues, on the average about 15% per year, just to hold the line on the benefits we currently offer. I think this is something about which we should all be concerned, not narrowly because Blue Cross and Blue Shield are involved, but because as Blue Cross and Blue Shield reflect the cost of health care, a rise in their cost reflects a rise in the cost of the basic product. This basic product should never be so expensive that it cannot be afforded.

I think we must attack this problem in two fundamental ways, 1) I think we should make sure that

health care costs no more than it actually must—this involves the cost of production as well as the amount being consumed. I think the second thing that we should do is to explain the "whys" and the "wherefores" to show the necessity of a fair cost so that the public will voluntarily pay for the care and not turn to the Government to provide it for them.

In this particular area, that of efficiency, I am most concerned with our general hospital system. I am not speaking now of specific individual hospitals but I am talking about our whole system within the state. I am very much disturbed over the seemingly random and sometimes competitive expansion of the facilities. I think this is extremely dangerous. We must realize that at the current time it costs about \$20,000 per bed for new construction. In order to sustain and maintain that bed, an additional annual requirement of about a fifth of that initial outlay must be met. This means that every hospital bed that is built in this state must be repaid for every five years. Furthermore, whether or not that bed is occupied is practically immaterial in terms of this recurring cost. So, the more beds we build, the more we must sustain, and whether or not they are used, the cost continues on as a burden to the community.

I am persuaded, as I always have been, that the American public can and will support, voluntarily, a high level and broad program of health care. But they will do so only as they are convinced the care is being provided and used on as an economic and an efficient basis as possible. This involves providing and using this care in as economic a way as is consistent with good medical practice and achieving an understanding, on the part of the general public, that this is what is being done.

I think this is the real task that we must be at in earnest and soon. The Forand Bill and several others like it point up the alternatives. The only real answer to those and other ever-present possibilities of socialization of medicine are a sound and lasting solution to the problem of health care distribution. I think that this solution is provided, and always has been, by Blue Cross and Blue Shield.

I would think it inadvisable to count longer on crash programs each time that the threat seems to loom larger. (Applause)

THE CHAIR: Thank you very much, Mr. Sandow. I would like to say this about Bill Sandow, he has recently been honored by National Blue Cross-Blue Shield and has been put on a committee to serve nationally on Advertising and Public Relations. We are certainly proud of him.

If there is no further business to come before the corporation, this concludes the Special Order of Business and I will declare the Annual Meeting of the Corporation adjourned. Dr. Crawford, I will turn the meeting back to you.

HOUSE OF DELEGATES—Dr. R. L. Crawford, Presiding

Wednesday, May 13, 1959, 10:00 o'clock A. M.

THE CHAIR: Gentlemen, the House of Delegates will come to order.

The first order of business this morning will be reports of the Reference Committees. The first report will be from the Reference Committee on Reports of Council and Officers, Dr. L. D. Lide, Chairman. (Dr. Lide recognized by The Chair)

DR. L. D. LIDE: Mr. President, members of the House of Delegates, the first item for Committee consideration was the President's Report, which was received as information, and the Committee recommends its adoption.

(This was voted on and passed)

The next was the report of the Executive Secretary, Mr. M. L. Meadors, this report was received as in-



formation and the Committee recommends its adoption. (This was voted on and passed.)

DR. WM. H. PRIOLEAU (Recognized by The Chair)

Mr. President would it save time if the reports which are to be received as information be read, and that the Chairman of the Reference Committee, if any point comes up that is controversial, then act upon that separately.

THE CHAIR: Thank you Dr. Prioleau, that is a good suggestion.

DR. LIDE (Continuing) The report of the Secretary was received as information and the Committee recommended its adoption.

The report of the editor of the Journal was also received as information and the Committee also recommended its adoption.

(The motion for the adoption of the two reports was seconded by Dr. Cain, and the motion was passed.)

The next was the report of the Chairman of Council, there were two items in that which were controversial and we will take up the first one, the report of the Committee on the permanent home for the Medical Association. The Reference Committee feels that at the present time consideration of a permanent home for the Association is impractical, and even in the future it should not be considered until sufficient funds for its construction are available. The Committee recommends that action on this question be deferred for the present and the existing Committee on the Permanent Home be disbanded. This Committee feels that, eventually, a permanent home, owned exclusively by the South Carolina Medical Association, in the City of Columbia, would be desirable. This report was unanimous.

(Dr. Prioleau moved the adoption of the report, this was seconded by Dr. Guess and Dr. Cain.)

THE CHAIR: Is there any discussion?

DR. LIDE: As Chairman I might say a few words.

Question—From the Floor: I might ask a question, is the \$5.00 a year in the dues to be continued under the recommendation of this Committee? The \$5.00 for the permanent home?

DR. LIDE: The Committee made no recommendation on that point.

THE CHAIR: Dr. Cain, can you answer that?

DR. CAIN: No, sir, I can't answer that, for this is a Reference Committee report, I don't know anything about that. I would think that should this Committee's report be adopted, then it would be in order to make some disposition of that earmarked money, under a separate resolution.

DR. WESTON (Recognized): Mr. President, I would like to ask Dr. Lide, as Chairman of his Committee, whether this Committee intends to do nothing about it, now, or the next 12 months because this Committee is reporting for the next 12 months. I would hate to see us at a standstill and just do nothing. I believe we can do something, we have approximately \$14,000.00, we ought to do something.

DR. LIDE: Mr. Chairman, I might make a few remarks just by way of reporting for this committee. Gentlemen, you have heard the report of the Permanent Home Committee, yesterday, and the Reference Committee could find no adequate reason for the need of transferring the office of the Association to Columbia. At the present time all of the business of the Association is carried on quite adequately in two or three office rooms in a dignified office building at a reasonable rent. One of the reasons for them proposing an office building in Columbia is that it will lend prestige. Our committee felt that a building quite sufficient for the present business of the Association would be small and we did not feel that a small building on a side street in Columbia could offer much in the way of prestige, and since the present

setup is adequate the Reference Committee felt that consideration of a permanent home is impractical at this time. Our committee also did not feel that the Association should go into debt to construct an office building. According to the report \$7,000.00 is on hand in the fund, apparently from the \$5.00 per member each year, and another \$7,000 will be anticipated this year, but the Committee did not feel that the Association should go into debt. It might continue with the present collection of the fee for the fund until the fund was much larger. The Committee felt that eventually a permanent home would be desirable but this was not contemplated for any time in the immediate future. The Permanent Home Committee has asked for a disposition of the matter and the termination of the committee and for this reason the Reference Committee recommends that action on this question be deferred for the present and, therefore, the existing committee on the Permanent Home be disbanded.

THE CHAIR: Is there any further discussion?

DR. WILLIAM WESTON (Recognized) It seems to me we are talking about two things, a permanent home and the removal of the offices of the state Medical Association to Columbia. Now, Dr. Lide, are you including both of those in your report?

DR. LIDE: This was in the Report of the Permanent Home Committee and that is the reason why the Reference Committee acted on it, on those items.

DR. WESTON: Well, if the report is to do nothing about it, I am definitely opposed to it. I think the time has come—you have just heard Dr. Johnson and Mr. Sandow make their report on the Blue Cross - Blue Shield; it was in Greenville for a good many years and Dr. Decherd Guess sweated over it and it was finally moved to Columbia where it is in the center of the State, not only in population but geographically; and I think things come up here in the legislature which are missed and we ought to have them right here when the Legislature is in session. The Legislature has adjourned temporarily and will be in session again in two weeks, and I am not so sure they didn't quit because we were coming here, for the time being. But, I think the time has come for this office to be moved here and that is what I would like to see passed, now. We don't have to have a permanent home to move here, you can rent an office here as well as in Florence, Dillon, Marion, or Mullins or any other place in the state. (Applause)

DR. BEN MILLER: In regard to the permanent home, I am not clear on the report of the reference committee and I think it should be made clear. I would be in favor of continuing the \$5.00 a year, still with the idea of building up a reserve. If that could be cleared, why I would be ready to vote on the Reference Committee's report.

Now, in regard to the comments of Dr. Weston regarding legislation, there is now in the hopper an all-inclusive adjournment bill, a bill which is very pertinent, which is the Spruill Bill, which is highly important. I think bills that are late sometimes get by and they need a little more consideration. That is just one thing further on Dr. Weston's comments.

DR. LIDE: The question on the \$5.00 or action on that portion of the dues paid each year, was not actually brought up, or at least the Committee did not feel action on that part was necessary. However, the sentiment in the Committee was expressed that it could well be continued in the absence of any positive action.

DR. CAIN: (Recognized) Gentlemen, I rise to discuss this question not so much from the standpoint of the Committee's report, which concerns the permanent home, but I believe the discussion has gotten a little off the beaten path. I would like to throw this point out-there has been no statement made, but it cer-





DR. CRAWFORD AND DR. PENDERGRASS

ainly was insinuated that under the present set-up the legislature action of our State Legislature has not been under careful scrutiny by the Association. I want to tell you that there is absolutely no truth in such an accusation. As the Chairman of Council for the last six years I have been very much interested in state legislation just like all the rest of you have. I can assure you that no bill has ever been introduced into the House of Representatives or into the Senate of this State that we did not know about; that we did not make a decision concerning. The present bills which have been mentioned this morning have been studied by our officials and we have made a decision which we think is correct in these cases. If we have made the wrong decision it was due to the fact we have not made the correct decision—not due to the fact that we are ignorant of what is going on. I think the record should be straightened on that point. (Loud applause)

THE CHAIR: Is there any further discussion?

DR. GUESS: (Recognized) Mr. President, I am on the Committee whose report is being discussed and I thought perhaps the Chairman was in the House and would have something to say about it. Apparently he is not here. Our report could be divided, although it wasn't specifically so done, into three parts. Now the committee advised that in its opinion it now is the time to move the office of the Association to Columbia. Secondly, that steps should be taken at this time to acquire a lot in Columbia. Several lots were discussed in the report, certain possibilities to buy at this time with the funds that will amount to about \$15,000.00 by the end of this year, to purchase a lot with the intent of at sometime building a home for the Association on that lot. Thirdly, the committee suggested by implication, at any rate, that the collection of \$5.00 per member, per year, continue until such amount was acquired that the building of a home on this lot would be a practical matter.

Now, it seems to me the Reference Committee should, in its report, break the thing down into those three sections; and it seems to me that this body should consider those three parts, Mr. President, namely, and Dr. Lide has actually presented it in his report,

- 1) In the opinion of the Reference Committee this is no time to move the offices from Florence. I think that is the thing we should vote on first.
- 2) The Reference Committee says that we should not undertake to build a home on credit; that implies that we should continue to acquire funds with the idea of ultimately building a home, not on credit but for cash. So, certainly I think that

is a part that should be considered as a separate matter.

- 3) I think that we should be allowed to speak as a House of delegates on whether or not this House believes that ultimately a home should be located in Columbia and that we have funds now, sufficient to buy a lot and that either the Committee or preferably the Council be instructed to seek and purchase a suitable lot with the funds that are lying more or less idle.

THE CHAIR: Thank you.

DR. CAIN: Call for the question.

THE CHAIR: You have all heard the question, as stated by the Chairman of the Reference Committee, Dr. Lide, all in favor.

DR. WESTON: I would like to have it repeated, Mr. President.

THE CHAIR: Would you repeat that, Dr. Lide?

DR. LIDE: The Reference Committee feels that at the present time consideration of a permanent home for the Association is impractical, and even in the future it should not be considered until sufficient funds for its construction are available. The Committee recommends that action on this question be deferred for the present and the existing Committee on the Permanent Home be disbanded.

Your Committee feels that eventually a permanent home, owned exclusively by the South Carolina Medical Association, in the City of Columbia, would be desirable. This is the recommendation of the Reference Committee.

THE CHAIR: Well, the recommendation is that we disapprove the immediate movement of the permanent home to Columbia and they want to discontinue or disband the present Permanent Home Committee and to continue to make plans to eventually have a permanent home in Columbia. Is that correct, Dr. Lide?

DR. FRANK OWENS (Recognized by The Chair) This question is certainly a very important one and I would like to say, as Chairman of the Legislative Committee during the past year that there have been a lot of matters in the Legislature of importance to our Association that have been investigated, and people at home contacted their legislators to try to keep up with what is going on. I would like to say our committee has gotten exceptionally good cooperation out of Mr. Meadors in regard to all of these questions. We have gotten information from him, apparently from him, certainly when we needed it and have contacted him and he has alerted us to things that have gone on. I believe the idea of transferring the activity to Columbia is one that should not be dropped completely. More and more, every year the activities are commanding the attention of doctors in this city and I would hate to see them dissolve the committee completely and abandon the whole idea. I believe that the committee should be continued and I would offer an amendment to the resolution that the permanent home committee be continued.

(Amendment seconded from the floor)

THE CHAIR: Gentlemen, you have heard the amendment, it has been seconded, and we will now vote on the amendment by a show of hands. All in favor of the amendment raise your right hand. Gentlemen, this is the amendment to continue the Permanent Home Committee. (Dr. Weston was asked to count those voting and he requested Dr. Sanders to count on the right and Dr. Shepherd on the left and they reported twenty-one and twenty-four, respectively.)

All opposed, please raise your right hand. It seems there is no doubt about it, the amendment is carried.

DR. LIDE: The Reference Committee took this action

because the Permanent Home Committee asked for some disposition of the matter.

DR. CAIN: Call for the question.

THE CHAIR: The Committee now recommends that action on the question of a permanent home should be deferred for the present.

DR. GUESS (Recognized by The Chair): Mr. President do I understand them that that means it will simply kill it as of now but it can be brought up again next year by the Committee or at some future date? Was that the intent of your Committee's Report, Dr. Lide?

DR. LIDE: With the amendment, that somewhat alters it.

DR. GUESS: I can vote for that, if it is just a deferral and our committee can bring it up again next year.

THE CHAIR: I would assume it would be just temporarily.

(Amendment) DR. TOM GOLDSMITH: Mr. President, I would like to offer an amendment to that, that the matter be referred to Council for its disposition.

THE CHAIR: You have heard the amendment, is there any second?

Dr. Goldsmith's amendment is that the matter be referred to Council for disposition.

DR. CAIN: Mr. President may I speak to that amendment?

THE CHAIR: Yes, Dr. Cain.

DR. CAIN: Gentlemen, I speak to the amendment for your information, and that is this, that Council considered this yesterday morning and could arrive at no decision and since it was vitally important to the House of Delegates, as their baby, they are paying \$5.00 a piece a year for it, we thought that it should be probably presented to the House of Delegates for their recommendation at this time. I am sure Council has no further desire to go into this unless it is given authority to act and this action be final. I think we should definitely instruct this committee one way or the other and apparently that is what the Reference Committee had in mind in recommending that it be disbanded. When the amendment passed it showed the will of the Association to keep the organization intact and that that is instruction to the Committee. I would like to see the amendment of Dr. Goldsmith withdrawn, if he will so do because I am sure Council does not want to handle this matter which properly is the property of the House of Delegates.

DR. GOLDSMITH: In the light of that I will withdraw my motion to amend.

THE CHAIR: All right, are you ready for the question. The question is that the matter of establishing a permanent home at this time be deferred until a later date and that the present Permanent Home Committee be continued. (A vote was taken by a raising of hands, the motion was passed and it was so ordered.)

THE CHAIR: Dr. Lide.

(Continuation of Reference Committee Report)

DR. LIDE: The next item was the consideration of the Report of Chairman of Council on Public Relations. It was recommended in the Special Report that \$3500.00 be allocated in the budget for Public Relations, \$1200.00 of this at \$100.00 per month for remuneration to Dr. Waring, the balance to be available for the employment of professional public relations firms as the circumstances warrant. The Reference Committee recommends the adoption of this report.

(This recommendation was seconded by Dr. Cain, there was no discussion, the question was called, the vote taken and it was unanimously carried, and was so ordered.)

DR. LIDE: (Continuing Report) It is the recommendation of the Reference Committee that the bal-

ance of the Report of Council be received as information.

The next item was the Treasurer's Report, which was received as information by the Reference Committee and we recommend the adoption of this report.

The next was the Report of the Delegate to the A.M.A. meeting of 1958; this was received as information and the Reference Committee recommends the adoption of this report.

(The above recommendations were seconded by Dr. Siegling, there was no discussion the vote was taken and carried and it was so ordered.)

DR. LIDE: Mr. President and gentlemen, we move that the report as a whole with recommendations as amended be adopted.

(This motion was seconded by Dr. Gressette)

DR. LESESNE SMITH: Mr. President, was it ever settled whether we were to have the \$5.00 fee continued, that is very important, it was brought up and should be settled.

THE CHAIR: It was not in this report.

All in favor of approving this report as a whole please signify by saying "aye". (The vote was taken, passed, and it was so ordered.)

THE CHAIR: The next is the report of the Reference Committee on Legislation and Public Policy, Dr. James H. Gressette, Chairman.

DR. JAMES H. GRESSETTE: I would like to take this opportunity to state that much was referred to the Reference Committee on Legislation and Public Policy and we would like to commend the reports of the various committees and thank them for their effort in behalf of the Association.

The Reference Committee members present were Drs. Harold S. Pettit, Charleston, Waddy Baroody, Jr., Florence, James L. Duncan, Spartanburg, and myself, and I wish to thank each member of my committee for their part in this report.

(1) The first report the Reference Committee considered was the report of the Committee on Coroners. The Committee accepts the report as presented and recommends the continuation of the Committee on Coroners under the conditions suggested by the Chairman, Dr. Pratt-Thomas. In substance that is that the President appoint a Chairman of the Committee in areas that have some coroner problem, but other than that leave it just as it is. We move that this be accepted.

(This was seconded by Dr. Cain, there was no discussion, the vote was taken, passed and it was so ordered.)

(Dr. Gressette continuing)

(2) With respect to the Resolution from the Spartanburg County Medical Society, this resolution reaffirms the stand taken in a somewhat similar resolution passed by this House of Delegates last year, and the Reference Committee recommends its adoption, and in the place of "The Spartanburg County Medical Society" insert "The South Carolina Medical Association" and thus make it statewide.

(This was seconded by Dr. Siegling, there was no discussion, the vote was taken, passed, and it was so ordered.)

(Just a comment, no action necessary)

An observation on that would be that the committee feels that each physician should be closely observant concerning legislation introduced by their county delegations, so that they will not introduce any legislation that may there be introduced that might become a statewide measure. For instance this was taken up as a local bill, therefore, it was not a statewide commitment.

(3) With respect to the report of the Committee of the South Carolina Medical Association for study of the medical profession in South Carolina regarding Social Security, there was considerable discussion about the



report of this Special Committee, and while we recommend adoption of the report we feel that there is a great deal of interest in this problem, and a degree of support for participation in Social Security that cannot be ignored.

THEREFORE, we also recommend a continuation of a Committee to study the developments in this situation and that this committee report to the House of Delegates next year, I move that that be adopted Mr. Chairman. (This motion was seconded by Dr. Cain, there was no discussion, the vote was taken and unanimously passed and it was so ordered.)

(4) With respect to the report of the Committee on Legislation and Public Policy, Dr. Frank Owens, Chairman, there is no controversial issue on that so the Committee approves the report and moves its acceptance, so we will pass on over that.

(5) With respect to the report of the Committee on Certification of Psychologists, this committee approves the report of that Special Committee and moves that we adopt it.

(This motion was seconded by Dr. McAlpine, there was no discussion, the vote was taken and unanimously passed. It was so ordered.)

(6) With respect to the report of the State Board of Medical Examiners of South Carolina: As to their yearly report, there is nothing controversial about it, so we will pass over it.

The report on Biennial Registration that was recommended by this Committee—this Reference Committee approves in principle the suggestions of the Committee for Biennial Registration of physicians licensed by the State of South Carolina, however, we recommend the details for suggested legislation be drawn up by the Committee on Legislation for presentation to the House of Delegates next year for final acceptance, and that the fee not exceed \$5.00 per re-registration. I so move, Mr. Chairman. (This motion was seconded by Dr. Robertson; there was no discussion, the vote was taken and passed. It was so ordered.)

With reference to Basic Science, this committee does not feel that it would be wise to adopt a basic science law at the present time and we so recommend. I so move, Mr. Chairman.

(This motion was seconded by Dr. Cain.)

THE CHAIR: Is there any discussion?

DR. PRIOLEAU (Recognized) May I ask, why?

DR. GRESSETTE: I will try to sum it up for you, Dr. Prioleau, it appears the Basic Science Law is in a state of flux; a great many of them that have it would like to not have it at this time. In Florida we are told that they have the Basic Science Law and they have probably the closest closed society or closed shop of any state and that they are trying to get from under it. Apparently, it appears that if we have a Basic Science Law that only the Basic Science group—we would have to have a few Ph. D.s to be able to question doctors, we would have to have a few chiropractors to be able to question them, a few optometrists, and a few of the allied professions because the doctors, themselves, could not control it. And it just seems on the surface and the amount of conversation we had at our meeting last night that it was not wise to do it at this time.

DR. N. O. EADDY: (Recognized by The Chair): This original motion originated from the Sumter-Clarendon County Medical Society, in fact Dr. Owen and his committee went into it thoroughly and we are willing to abide by the decision of the committee. We think the Committee was probably wise in their conclusion and we also recommend the adoption of the committee report as reported out by the Reference Committee.

THE CHAIR: Is there any further discussion?

(The question was called for, the vote was taken, the motion passed and it was so ordered.)

DR. GRESSETTE (Continuing)

(7) With respect to the resolution presented by the Pee Dee Medical Association on alcoholism, the recommendation of the committee is that this be adopted and that a special committee on alcoholism consisting of three members to be appointed by the President, and we so move.

(This motion was seconded, there was no discussion, and the vote was taken and motion passed. It was so ordered.)

DR. GRESSETTE: Mr. President, I move the adoption of the report as a whole.

(This was seconded by Dr. Cain, there was no discussion, the vote was taken, passed and it was so ordered.)

THE CHAIR: The next Reference Committee report will be that of Public and Industrial Health, Dr. F. C. Owens, Chairman.

DR. FRANK C. OWENS: This is the report of the Reference Committee on Industrial and Public Health.

(1) "The Report of the Committee on Infant and Child Health. The Reference Committee recommends that the request of the above Committee to change the number of members of the Committee from five (5) to nine (9), to include three general practitioners, three pediatricians, and three obstetricians, be adopted, and that Section 9 of the By-Laws be changed to read as printed in the report of the Committee on Infant and Child Health on Page 152 of the April issue of *The Journal*."

Now, this particular recommendation is also in the hands of another committee and I don't believe it will be necessary to take action on this recommendation at this time as it will be presented later by another committee.

(2) Report of the Committee on School Health. Your Reference Committee recommends that this report be accepted as information.

(3) Report of the Medical Advisory Committee to The Crippled Children Society. It is recommended that this report be accepted as information.

There is no controversy over either of those and no specific recommendation.

(4) The Committee on Maternal Health. The Committee recommends that the report of this committee also be accepted as information.

(5) Report of the Executive Committee of the State Board of Health. It is recommended that the above Report be accepted as information.

Now, with reference to these four reports that I mentioned, we would like to make a motion that they be accepted as information.

(The motion was seconded by Dr. Evatt, there was no discussion, the vote was taken, passed and it was so ordered.)

(Dr. Owen continuing with his report)

(6) Report of the Committee on Industrial Health. On the recommendation on this report I had best give you a little background on it. In 1958 at the Annual Meeting of The South Carolina Medical Association there was a motion passed instructing the President of the Association to gather information concerning discrepancies in the Administration of the Workmen's Compensation Act and present that to the Governor. I think it was realized sometime during the past year that that was impractical and perhaps not the proper thing to do.

So, in the report of the Committee on Industrial Health there was a recommendation made to this effect: and the Reference Committee recommends the adoption of the following portion of the Report: "At the 1958 Annual Meeting of the South Carolina Medical Association the Reference Committee on Public and Industrial Health recommended that the Presi-



dent of the Association bring to the attention of the Governor of South Carolina discrepancies in the administration of the Workmen's Administration Act by the South Carolina Industrial Commission. This was approved by the House of Delegates and the Committee on Industrial Health was charged with the responsibility of obtaining evidences of discrepancies." (Now, this is the recommendation.) It is recommended and moved that the President of the South Carolina Medical Association be relieved of this directive. We would like to move the adoption of this recommendation, Mr. President.

(The motion was seconded by Dr. Cain and others, there was no discussion, the vote was taken, passed and it was so ordered.)

(7) The last recommendation has to do with the report of the Committee on Workmen's Compensation Fee Schedule. This reference committee recommends that the fee schedule as here submitted be submitted to the Industrial Commission of South Carolina as a suggested fee schedule.

I might say that back about seven or eight years ago there was a fee schedule suggested and adopted by the Industrial Commission. It was felt that this fee schedule was out of date, the fees listed were not adequate or in keeping with what was charged over the state. This was upped to some extent, usually by the Commission in individual cases, for instance hernia operation, and then the committee worked on it and made some suggestions on upping some of the others. There was one particular item in there which had to do with the first office call. The schedule called for \$5 for the first visit and \$4 for each additional visit. That was true with house and hospital calls, too. The hospital call was \$4 for the first and \$4 for each subsequent visit. The committee felt that \$7 would be more in keeping for the first visit, considering the examination and reports which have to be sent in, however, after communicating with a number of different sources and discussing the matter it was felt it would be wise to drop that back to the \$5, so in this schedule that is set at \$5 for your first visit, \$4 for each subsequent visit.

In a few other instances in here the fees have been raised. We communicated—when I say "we" I am talking about the committee I was on with Bill Edwards and a few others—we communicated with people all over the state and found out what fees were charged in that neighborhood and in some instances we have actually come down a little bit on the usual charged fee. If there is any specific fee that any of you would like me to look up in this and give it to you, I will be glad to do it. I might say that the committee after studying it, that is the Committee that drew it up, and also the Reference Committee feel that it is a just fee schedule.

It is recommended that this be adopted as a suggested fee schedule for the Industrial Commission to go by on industrial cases. It is not a fixed fee schedule. Apparently some of the doctors over the state have gone a little bit 'hog wild' you might say on sending fees in to that Industrial Commission, and if we have a sort of a ceiling, you might say, that will act as a ceiling except in specific, complicated cases, which could be justified by letter, we believe the Commission could operate better and the medical profession over the entire state would be in good repute, you might say. So, we recommend the adoption of this suggested fee schedule as a suggested fee schedule in Workmen's Compensation cases.

(This motion was seconded by Dr. Stokes.)

THE CHAIR: Is there any discussion? (Dr. Weston was recognized)

DR. WILLIAM WESTON: I don't have much to do with the Industrial Committee, or the Commission but I would like to say that I resent very much for a

Television or a Radio man to come to my house and look at it, and it is either \$5, \$6 or \$7 and they don't do a darn thing, and I just think we are belittling ourselves by keeping it at \$5.

THE CHAIR: Any further discussion?

(There was none, the vote was taken, the motion passed and it was so ordered.)

(Motion was made to adopt the report of the Reference Committee on Public & Industrial Health as a whole; this motion was seconded by Dr. Weston; there was no discussion, the vote was taken, passed and the report was adopted.)

THE CHAIR: The next Reference Committee Report will be that on Amendments, Constitution and By-Laws, Dr. Henry C. Robertson, Jr., Chairman.

DR. H. C. ROBERTSON: The Committee on Amendments to Constitution and By-Laws had referred to it that part of the report of the Committee on Infant and Child Health, which requested a change in Section 9 of the By-Laws, so as to read as follows:

First, before reading the section let me state that, as Dr. Owens indicated in his report the requested change will change the constitution of this committee. Dr. Walter Hart, who was Chairman of the Infant and Child Health Committee for the past year, appeared before the Reference Committee for which we are very grateful. Originally Section 9 called for a committee of five (5), and this enlarges the committee and specifies as to the nominations of the personnel of the Committee.

The Reference Committee recommends this change with the exception of the last sentence, as printed in *The Journal*. If you will bear with me I will read the recommended change and will so indicate the portion which we did not recommend.

SECTION 9. "The Committee on Infant and Child Health shall consist of nine members who, after the initial terms, shall be appointed to serve for terms of three years each. After the initial appointments three members, one nominated by each organization named below, shall be appointed for a term of three years. No member may succeed himself or herself. Three members of the committee shall be general practitioners and shall be nominated by the South Carolina Academy of General Practice, one initially for a one year term, one for a two year term, and the other for a three year term; three members shall be specialists in obstetrics and gynecology and shall be nominated by the South Carolina Obstetrical and Gynecological Society, one initially for one year term, one for a two year term, and the other for a three year term; and three members shall be specialists in pediatrics and shall be nominated by the South Carolina Pediatric Society, one initially for a one year term, one for a two year term, and the other for a three year term; provided however, that should notices of such nominations not be received by the Secretary of the Association before adjournment of the annual meeting of the Association the President shall select the members of the committee without such nomination or nominations.

Now, this final sentence is the one which we thought should be changed. It read as follows, in the Committee report.

"The committee shall organize and elect its own officers, the chairman shall be one of the specialists in pediatrics."

Your Reference Committee recommends this change, so that that sentence shall read as follows:

"The chairman of the committee shall be one of the specialists in pediatrics and shall be appointed by the President of the Association."

As the original committee report read we had a committee with no chairman and nobody to call the first meeting, nobody to organize it and nobody to report back to the Medical Association, and we thought that

change should be in there and this was agreeable with the previous chairman of the Infant and Child Health Committee.

Therefore, Mr. Chairman, I move the change in the By-Laws as submitted by that committee with the exception of the last sentence which shall read as indicated. (This motion was seconded by Dr. Guess.)

THE CHAIR: This is an amendment to the By-Laws and this will require a two-thirds vote for passage. Is there any discussion?

DR. WESTON: A question, is the Chairman to be appointed for just one year.

DR. ROBERTSON: The Chairman shall be appointed for one year, annually.

DR. WESTON: Is he able to succeed himself?

DR. ROBERTSON: It doesn't specify.

THE CHAIR: This is a change of the by-laws, is there any further discussion? This vote will be taken by standing, all in favor please stand. (Dr. Weston appointed Dr. Shepherd to count on the left and Dr. Sanders on the right.)

(It was announced there were fifty-one voting for the amendment. When the chair called for those opposed no one stood.) It is so ordered.

DR. ROBERTSON: Although this was the only matter referred to this Reference Committee, a discussion of this matter brought out something we thought should be changed. Would it be in order for us to suggest a change in the By-Laws that was not referred to the Reference Committee?

We recommend that Section 12 of the By-Laws be changed for this reason, in talking about the committee appointments it was brought out that from the time of the annual meeting until such time as the President appoints committees we are without many standing committees and Section 12 as it stands at present reads as follows:

SECTION 12 (in reference to Standing Committees) "Members shall be appointed to standing committees by the President unless otherwise provided for in these By-Laws. These appointments shall be announced by the President within 30 days after he assumes office."

We recommend that it be changed to read as follows:

SECTION 12 "Members shall be appointed to standing committees by the President unless otherwise provided for in these By-Laws, and shall serve until their successors are appointed. These appointments shall be announced by the President within 30 days after he assumes office."

Mr. Chairman we recommend that change in Section 12 of the By-Laws.

THE CHAIR: You have heard the recommendation to change Section 12 of the By-Laws, is there any second?

DR. GOLDSMITH (Recognized by The Chair) I am in favor of the change, but it is out of order. A reference Committee can not bring up a change, it would have to come first from the Standing Committee on Constitution and By-Laws.

THE CHAIR: I think this can be done by unanimous consent of the House of Delegates. Is there any objection from the House of Delegates to the consideration of this motion? If there is no objection then we will put the question. You heard the motion, is there any second. (Dr. Guess seconded the motion.) Is there any discussion?

DR. PERRY (Recognized by the Chair) Dr. Crawford, I have one question—something must be in there or some arrangement must be made so that the old Chairman or committee member is notified he is no longer a member of that committee. (There was no further discussion.)

THE CHAIR: This will have to be carried by a two-thirds vote. All in favor of the question please stand. (The motion was carried 54 to nothing and it was so ordered.)

DR. ROBERTSON: This concludes our reference

committee report. Mr. President and I move the adoption of the entire report. This was seconded by Dr. Timmons. (The vote was taken, passed and it was so ordered.)

THE CHAIR: The next report will be that of the Reference Committee on Miscellaneous Business, Dr. McAlpine, Chairman.

DR. McALPINE: The Reference Committee on Miscellaneous Business considered the following Committee reports:

(1) Historical Medicine. We feel that the House of Delegates should approve the report as presented, including the requisition of \$500.00 to further the publication of a History of Medicine in South Carolina. Mr. Chairman, I move that this be adopted.

(This motion was seconded by Dr. Guess, there was no discussion, the vote was taken, the motion passed and it was so ordered.)

(2) Scientific Program Committee. The Reference Committee expresses its appreciation for the arrangement of the Scientific Program and requests that the suggestion of departmental or sectional programs be referred to the incoming Scientific Committee for further study.

Mr. Chairman, we move that this be adopted.

(This motion was seconded by Dr. Guess and Dr. Mayer)

THE CHAIR: Is there any discussion?

DR. MAYER (Recognized by The Chair) Having been the recent Chairman of the Scientific Committee I want to follow this up. Each specialist thinks his specialty should have a rather prominent part on the program and having a day and a half it is impossible to satisfy all.

It would be a considerable help to the incoming Chairman to have some expression whether you want the programs continued on the basis as they are now conducted or whether you would want to try a limited amount of sectional meetings so that the program can be tailored to your desires and wishes. And I would feel, if it is in order, that at least an informal show of hands could guide the incoming chairman as to whether you want it continued the way it is or whether you want departmental or sectional type of program tried.

THE CHAIR: Is there any further discussion? If not a vote on this question will be taken by a show of hands, all in favor please raise your right hand, this is on the adoption of this portion of the Reference Committee's report.

DR. McALPINE: Dr. Mayer requested a show of hands to guide the incoming Scientific Program Committee as to whether or not there should be some departmental or sectionalization of the internal medicine, surgery, etc., and he wanted it as a guide, rather than a vote, from the floor saying this should or should not be done, is that right, Dr. Mayer?

DR. BLANTON: (Recognized by The Chair) Unless our attendance at these meetings improve somewhat, along the lines of other meetings we are trying, I don't see where we could get any good out of departmentalized or sectionalized meetings.

DR. McALPINE: That was discussed last night, we thought maybe the departmental or sectional programs might increase the attendance of the meetings rather than decrease them.

THE CHAIR: The motion before the house is Dr. McAlpine's motion that has been seconded that we adopt the portion of the report that he first read, to refer the matter of establishing departmental programs to the Scientific Committee. (The vote was taken, the motion was passed and it was so ordered.) Dr. Mayer requests that we have a show of hands for the guidance of this committee as to whether it would be necessary to have departmental programs or as to whether they want departmental programs or not. All





*Officers of the Association: (L. to R.) Dr. Clay W. Evatt, new Vice-President; Dr. Robert Wilson, old Secretary; Dr. Joseph P. Cain, President-Elect; and Dr. William Weston, Jr., President for this year.*

in favor of that please hold up your right hand, this is in favor of departmental meetings. (No one voted.) Dr. McAlpine (Continuing his report)

(3) Committee on Civil Defense, including the supplemental report presented to the House of Delegates May 12, 1959. The Civil Defense Committee felt that with the establishment of a Civil Defense Director's Office in Columbia, under the State Government, that this Committee should be disbanded as a part of the Standing Committees. The Reference Committee appreciates the work done by the Committee on Civil Defense, but does not feel that initiation of the S. C. Civil Defense Director's office in any way negates the importance of this committee, and recommends that it be retained as a standing committee. I move that this be adopted. (This was seconded by Dr. Robertson.)

THE CHAIR: Is there any discussion? (Dr. Cain, recognized)

DR. CAIN: Did I understand correct that you ask that the committee be continued?

DR. McALPINE: Yes, sir.

DR. CAIN: Is this a Committee of the House of Delegates?

DR. McALPINE: I thought it was a standing committee.

DR. CAIN: Gentlemen, I believe that this is a committee of Council which has been doing the work for the Association. Council, yesterday, voted to discontinue the committee, which was included in our report at that time. So, unless it is a Standing Committee of the House of Delegates, and I do not believe it is, I believe the action on this committee has already been taken. If the House of Delegates wishes to reconsider and make this a special committee, I would be glad to have that issue clarified, but as of now this committee on Civil Defense, which was originally a Council committee, has been disbanded.

THE CHAIR: Is there any further discussion?

DR. McALPINE (Chairman) In order to clarify this Committee perhaps we should have a vote of the House of Delegates as to whether or not they want the Standing Committee on Civil Defense. If they desire a Committee on Civil Defense it will be carried out, if not, we will adopt the report of the Civil Defense Committee as reported to the Reference Committee.

Mr. Chairman, I recommend that the Civil Defense Committee be continued as supported by the House of Delegates.

THE CHAIR: Is there a second to this motion? (It was seconded) Is there any discussion?

(The vote was taken on the motion and it was defeated) The noes have it and it is so ordered.

DR. McALPINE (Continuing Ref. Com. Report)

(4) The report of the American Medical Education Foundation, we feel that this committee has done an outstanding job, but feel that there is still a lack of understanding on the part of some physicians as to exactly what this Foundation is, and that further dissemination of information would perpetuate and increase our productivity. We feel that the report should be accepted and I move the adoption of this section. (This motion was seconded by Dr. Weston.)

THE CHAIR: Is there any discussion?

(There was no discussion, the vote was taken, passed, and it was so ordered.)

DR. McALPINE (Continuing)

(5) The Committee on Welfare and Rehabilitation. We wish to reiterate and underscore the section of the report dealing with the differentiation between a Welfare patient and a Rehabilitate patient in that the general philosophy of stressing rehabilitation of the indigent takes precedence over the matter of pure welfare support.

The matter of multiple solicitation for support of medical care and research deserves further study. We feel that the educational value derived during the monetary drives of some of these agencies is invaluable and could not be replaced by a single United Fund drive, however, the lists of agencies soliciting funds is growing daily and we feel a study group should be appointed to delve into the matter with particular reference to bonding laws, out-of-state solicitation and state charters for a soliciting group. We so move.

THE CHAIR: You have heard the motion that this portion of the report be adopted, is there any second? (The motion was seconded) Is there any discussion? (Dr. Eaddy recognized by the Chair)

DR. N. O. EADDY: Does this motion include the entire report of the committee on Welfare and Rehabilitation?

DR. McALPINE: Yes, the entire report.

DR. EADDY: May I discuss that? (Permission was granted by The Chair.) Mr. President, House of Delegates of the South Carolina Medical Association, many people say that the State of South Carolina will not furnish the money for rehabilitation, for instance, so we oppose money, any money, regardless of the



source to help these poor people who are otherwise helpless. Others say, we have to pay the tax, anyway, and so we might as well get what we can, however we can.

Now, this matter is a matter of importance so I would like to read about two paragraphs of this Committee's report. Before I do I would like to praise the Committee heartily; they have done a world of work on this and other problems. You don't get praise, as a rule for something you do for which others agree; you don't get criticized for the things you do unless other people disagree. I would like to divert for a moment to praise Dr. Miller and his Committee for the long hours of work they have put on this problem and we have a difference of views, I am sure, about the matching funds philosophy. For that reason I would like to read two short paragraphs of this report. I borrowed this *Journal* a moment ago from Dr. Miller, so there is nothing personal about this. (Reading)

"Due cognizance was taken of the several state agencies dealing with welfare and rehabilitation. A detailed list of the facilities and projects of the agency for rehabilitation was furnished the members of the committee. The committee recommended the general philosophy of stressing rehabilitation of the indigent to take precedence over the matter of pure welfare support.

"The problem of matching federal funds with state appropriations for rehabilitation and welfare was generally discussed. It was felt that where proof of need for funds is shown and where facilities for administering these funds properly prevailed that appropriations of state funds in order to secure federal matching funds should be encouraged. Some moderation in judgment is solicited for the protection of the taxpayers and the budget in general."

In the question of matching funds, the philosophy involved is fundamental. Do you want an all powerful, condescending, paternalistic federal government, or do you want a strong state government? As a matter of fact we get back only \$1 for every \$3 or \$4 we send to Washington and what we get back we have to match, even again, that is why they are called 'matching funds'. True, without accepting matching funds we may still pay, and pay, and pay, and get back nothing, but somebody must take a stand. If the medical profession won't, who in the world will? We have the opportunity to exhibit to the nation, integrity, independence, character, determination to stand on principle, or we can exhibit our willingness to sell our integrity, our independence, our willingness to stand on principle for a mess of financial pottage from Washington. We can accept these matching funds with the creeping increase in Federal controls and concurrent loss of local freedoms, or we can reject them.

If we vote for the continuation of these matching funds we should not quarrel and fuss about higher taxes, aid here and there, crop subsidies and all the other things we are going straight on fussing about. This is part and parcel of the same problem. If we take the attitude 'we might as well get ours' we certainly should not criticize others for taking the same attitude, including the farmer, who gets an irrigation well dug.

The Sumter-Clarendon County Medical Society is opposed to that part of this report recommending accepting matching funds, realizing that they are not free, that they cost us some \$3 for every \$1 we get, and that on top of that we still have to match it.

I wish again to compliment Dr. Miller's committee and move we accept the report as brought from the Reference Committee with the exclusion of the recommendation regarding matching funds. (Applause)

THE CHAIR: Any further discussion?

DR. GOLDSMITH: Did he make that as a motion,

Mr. President, as an amendment to that part of the report?

DR. EADDY: Was that question directed to me?

DR. GOLDSMITH: Yes, sir. Repeat your motion, please.

DR. EADDY: I wish to compliment Dr. Miller's committee and move that we accept the report as brought from the Reference Committee with the exclusion of the portion recommending accepting matching funds. I make a motion to that effect, Mr. President.

(This motion was seconded by Dr. Goldsmith.)

THE CHAIR: The question is now on the amendment as stated by Dr. Eaddy. Is there any further discussion?

DR. BEN MILLER (Recognized by The Chair.)

I can't disagree with Dr. Eaddy; virtue is its own reward, and this is a great idea if it can be carried out, but we can't get by the sound idea of finance. If we were able to make our ideas prevail we would throw South Carolina's financial structure out of kilter and we would have apoplexy, as well as Mr. Brown, and several other things. As it is, we are accepting matching funds in a very large way, so it is a matter of whether we are willing to go along as it is or whether we would like to put ourselves in a reasonably better position without hurting ourselves, because these agencies theoretically must be supported and theoretically this is a way of getting to it, because the money is going out. The question is whether we shall get some of it back as we appropriate funds for our agencies.

So, going back to the concept that virtue is its reward, in itself, we must think of a practical way to operate our agencies. Thank you.

THE CHAIR: Any further discussion?

DR. TOM PARKER, Greenville (Recognized by The Chair)—I would just like to say, briefly, we are taking a firm stand as regards education. Certainly we feel we need money for education but we don't want Federal money. The State of Indiana has taken the same position with regard to aid to education. The last thing that Senator Jenner did was state that they would handle their own affairs. In Kentucky a county which did not care to accept Social Security stated they were able to take care of their old people, and they were doing it, and the State of Kentucky went to law against the county and sued the County and forced it to accept Social Security because otherwise it would have thrown out the State program. All you have to do is look around and see that private enterprise and individual responsibility at the present time is losing out, and it may be that it is the Lord's will that we go through trouble before we come out again but I feel that where we have a right to stand on the clear matter of principle, that we ought to stand on the matter of principle. (Applause)

THE CHAIR: Is there any further discussion. Are you ready for the question?

DR. GOLDSMITH: This is the amendment to exclude "matching funds", not to accept it.

(The vote was taken and it was by rising. Twenty-three (23) votes were cast for the amendment, not to accept. Thirty-three (33) votes were cast opposing the amendment.)

THE CHAIR: By a vote of 33 to 23 the amendment is lost.

The question now is on the adoption of the recommendation of the Reference Committee, on that portion of the report. (The vote was taken, the motion was passed and it was so ordered.)

DR. McALPINE (Continuing Ref. Report)

(6) The next business was the Committee Report on Liaison with Allied Professions, as found in *the Journal* and associated with this report we included the Charleston County Resolution, referable to the establishment of district committees, on professional

liability. "This committee has been quite inactive during the past in a field that is increasing in importance daily. We feel that definite instruction to this committee is needed, particularly in the field of malpractice suits.

"This is brought out by the resolution presented to the House of Delegates by the Charleston County Medical Society referable to the establishment of District Committees on professional liability be set up in each of the nine Medical Association Districts for consideration of the facts surrounding any claim.

"We feel that this resolution should be referred to this committee for study and reporting to the Council." We move the acceptance of this, Mr. Chairman. (This motion was seconded by Dr. Prioleau, there was no discussion, the vote was taken, the motion passed and it was so ordered.)

(7) Report of Medical Standards Committee for Driver Certification. We feel that the report should be accepted by the House of Delegates as reported, as information. I move its acceptance, Mr. Chairman.

(This motion was seconded, there was no discussion, the vote was taken and motion passed. It was so ordered.)

(8) Special report on the Establishment of a Benevolence Fund. We feel that this resolution should be accepted and in order for it to move most expeditiously, suggest to the President-elect that Dr. W. A. Smith be made a member of a committee to study means of establishment of this fund and that the president avail himself of his recommendation in selection of further members of this committee. Mr. Chairman, we move the adoption of this report.

(This motion was seconded by several, there was no discussion, the vote was taken, motion passed and it was so ordered.)

(9) On the resolution from the Medical Society of Wisconsin, Referable to the Issuance of Stamps for Improving Safety on the Highways, we feel that, while the rate of accident and deaths on the highways are appalling, we hesitate to endorse a proposal which, to us, has dubious value and is not in the interest of economy in the national government. We feel that more appropriate avenues should be exploited and utilized. Mr. Chairman, we move that this resolution not be adopted by this body. (This motion was seconded by Dr. Lesesne Smith, there was no discussion, the vote was taken, the motion passed, and it was so ordered.)

DR. McALPINE: That completes the report of the Reference Committee on Miscellaneous Business and I move that the entire report be adopted, as amended. (This motion was seconded by Dr. Evatt, there was no discussion, the vote was taken, passed, and it was so ordered.)

THE CHAIR: The next report is that of the Reference Committee on Insurance, Blue Cross and Blue Shield, Dr. Wm. H. Prioleau, Chairman.

DR. WM. H. PRIOLEAU: Dr. Crawford, this is the report of the Reference Committee on Insurance, Blue Cross and Blue Shield. There are three topics under consideration:

(1) The committee recommends approval and adoption of the Program for Prepaid Medical Care coverage for the Aged as proposed by the South Carolina Medical Care Plan. I move the adoption of that part of the report. (This motion was seconded by Dr. McAlpine, there was no discussion, the vote was taken, motion passed and it was so ordered.)

(2) The committee recommends for approval and adoption the Report of the Special Committee on Establishment of Review and Adjudication Committees over the State for Blue Cross and Blue Shield. I move the adoption of that.

(The motion was seconded by Dr. Weston, there was

no discussion, the vote was taken and it was unanimous. It was so ordered.)

(3) The committee recommends approval of the Professional Liability Insurance program offered by the St. Paul Fire & Marine Insurance Company and the St. Paul Mercury Insurance Co., as recommended by the Committee on Insurance. I recommend the adoption of that report.

(There were several seconds from the floor, there was no discussion, the vote was taken, passed and it was so ordered.)

DR. PRIOLEAU: I recommend the adoption of the report as a whole, Mr. President.

(This was seconded, there was no discussion, the vote was taken, passed and it was so ordered.)

THE CHAIR: Thank you, Dr. Prioleau. That concludes the Reference Committee reports.

(General announcements made)

I wish to make an announcement on the present proposed plan for Civil Defense:

The President and President-elect of the South Carolina Medical Association will be the Chief and Vice Chief, respectively; there will be a Personnel Chief and Vice-Chief; a Supply Chief and Vice-Chief; and a Transportation & Communications, Chief and Vice-Chief and there will also be six (6) Congressional Districts which will be represented by Area Chiefs.

(5-Minutes Recess)

#### 11:30 A. M. ANNUAL ELECTIONS

THE CHAIR: Now, the time has arrived for the next order of business, the Annual Elections. The first will be the president elect, nominations are in order.

DR. HAROLD S. GILMORE, Mullins: (Recognized by The Chair) Mr. President and Members of the House of Delegates, on behalf of the Marion County Medical Society I wish to nominate for President-elect for the South Carolina Medical Association, and I am not going to try to make a mystery story out of this by leaving his name to the very last, because you will recognize to whom I am referring in about the first two sentences I make, but I wish to nominate Dr. J. P. Cain of Mullins. Dr. Cain is past president of the Marion County Medical Society and the Pee Dee Medical Association. He was elected to Council of the South Carolina Medical Association in 1950 and after four years on Council his ability and leadership was recognized to the extent that his fellow Councilmen elected him Chairman, which position he has held for the past five years. This confidence has, I think, been amply justified in his brief, brilliant leadership during perhaps some of the most critical years this association has ever experienced. If any one man in this Association could lay claim to defeating the naturopaths it would be Joe Cain. He gave his time, energy and clear-thinking ability and leadership as very few members of this Association are really aware of. The sacrifices that he has made in that long drawn-out fight with the naturopaths will perhaps never be known. Despite some differences in attitude about Medicare, Joe worked awfully hard, made trips to Washington and elsewhere to get for this Association a contract comparable to any state in the Union. One of his finest achievements, as Chairman of Council, I think, was the getting of a better contract with Blue Shield through an understanding of the problems involved. As Chairman of the Committee on Insurance he negotiated an excellent disability contract with Educators' Mutual. I could go on and name numerous committees that Joe has been serving on and is now serving on with distinction but suffice it to say that he has been an outstanding member of this Association for many years and I think has chalked-up one of the finest records, as Chairman of Council, that this Association has ever had.

It is with pride and a peculiar pleasure that I put into nomination the name of my good friend Joe Cain as



President-elect of the South Carolina Medical Association. (Deafening applause)

THE CHAIR: Are there any seconds on the Nominations?

DR. HANCKEL: I second the nomination.

DR. EVATT (Recognized) I move the nominations be closed.

DR. HOWARD STOKES: I would like to second that first, I would like very much to second it.

(Dr. Evatt's motion seconded by Dr. Owens.)

THE CHAIR: Dr. Evatt has moved the nominations be closed and that Dr. Cain be elected by unanimous ballot, all in favor of this motion signify by saying "aye". (The vote was unanimous and the house applauded the election.)

The secretary will be directed to cast a unanimous ballot for Dr. Joe P. Cain. I will now appoint Dr. Stokes and Dr. Owens to go out and escort Dr. Cain to the platform.

THE CHAIR: The next office to be filled will be that of Vice-President. Are there any nominations?

DR. HANCKEL: (Recognized) Mr. President, I would like to nominate Dr. Sam Cantey, of Marion. (This nomination was seconded by Dr. Gilmore and others.)

THE CHAIR: Are there any other nominations?

DR. PRIOLEAU? I would like to nominate Dr. Clay Evatt, of Charleston.

(This was seconded; motion was made that the nominations be closed, which motion was seconded, voted on and passed.)

THE CHAIR: It is so ordered.

Now, I am going to ask Dr. Owens and Dr. Stokes to please escort Dr. Joe Cain to the Platform.

(Applause, the House stands, pictures are made.)

DR. CAIN: Members of the House of Delegates, thank you very much for electing me your President-elect. I will try to be a faithful understudy and next year when I take over the job of the presidency I hope I will be worthy of the job.

With your permission and indulgence I would like to perform one more task, as Chairman of Council, I would like for Dr. Henry C. Robertson, and Dr. Norman Eaddy to come to the rostrum and stand with Dr. R. L. Crawford (the doctors comply).

Gentlemen, it is with a great deal of pleasure that I, as Chairman of Council, present you men with this certificate of grateful appreciation from the South Carolina Medical Association for performance well done, (handing the certificates)

Dr. Crawford as President of this Association 1958-59; Dr. Robertson as Vice-President of the Association 1958-59;

Dr. Eaddy, as Vice-President of our Association 1957-58. (Applause)

THE CHAIR: Thank you, Dr. Cain.

Now, there have been two members nominated for Vice-President, Dr. Sam Cantey and Dr. Clay Evatt, you will prepare your ballots.

While the ballots are being counted, we will proceed with the election of the Secretary.

DR. O. B. MAYER (Recognized): Mr. President, it is my pleasure to nominate Dr. Robert Wilson to succeed himself.

(This was seconded by Dr. Gilmore and by many)

DR. McALPINE: I move the nominations be closed, (This same nomination was made by Dr. Milling) (The motion was seconded)

THE CHAIR: All in favor of Dr. Robert Wilson being elected by acclamation, signify by saying "aye". (The vote was unanimous) (Applause)

DR. WILSON: Thank you all very much.

THE CHAIR: (laughing) The Secretary is instructed to put himself in, since he has been re-elected.

THE CHAIR: The next is the election of a treasurer, are there any nominations?



(Photo by E. S. Powell)

*Special citations for service to the South Carolina Medical Association and the medical profession were presented to three Association officers at the annual session.*

*The awards were presented by Dr. Joseph P. Cain, Jr. immediately after his selection as President-Elect of the organization.*

*Receiving the citations were (Right to Left) Dr. R. L. Crawford of Lancaster, who retires this year as president of the Association; Dr. Henry C. Robertson, Jr. of Charleston, the outgoing vice president, and Dr. Norman Eaddy of Sumter, the 1957-58 vice president.*

DR. FLEMING (Recognized) I would like to nominate one of the finest men I have ever had any dealings with as Treasurer,—you can't get a dime out of him, he keeps all the money, and won't turn it loose, and that is the reason we are in such good financial condition as we are today, that is Dr. Howard Stokes of Florence.

(This nomination received a number of seconds)

(Motion was made by Dr. Clay Evatt that the nominations be closed, and this motion was seconded)

THE CHAIR: I am sorry, this office of treasurer is a nomination from Council, and it has been moved that the nominations be closed.

Dr. Cain is that the official nomination, Dr. Cain?

DR. CAIN: Yes, sir, from an official representative of Council (referring to the fact that Dr. John M. Fleming, who made the nomination was a councillor.)

THE CHAIR: All in favor of electing Dr. Howard Stokes Treasurer, please signify by saying "aye". (The vote was unanimous and it was so ordered.)

THE CHAIR: The next office to be filled is the Delegate to the A.M.A., a two year term. The term of Dr. William Weston expires December 31, 1959.

DR. FRANK OWENS (Recognized) Experience is a great teacher, experience is a great asset, when we are in a position to send delegates back to A.M.A. term after term we are very fortunate because they make contacts and are in a position to wield influence in medicine over the United States, therefore, I would like to nominate Dr. "Bully" Weston to succeed himself. (This was seconded) (applauded)

DR. HALL: I move that the nominations be closed and that Dr. Weston be elected unanimously.

(This motion was seconded, voted on and passed.)

THE CHAIR: I will instruct the Secretary to report that Dr. Weston has been unanimously elected.

(Announcement as to Election of Vice-President)

I am happy to announce at this time that Dr. Clay Evatt has been elected Vice-President. (Applause)

I would like to have Dr. Evatt stand up and be recognized. (Dr. Evatt stands and there is applause.)

The next is the election of an alternate delegate to A.M.A., 2 year term; the term of Dr. Robert Wilson expires December 31, 1959.

DR. ROBERTSON (Recognized) Mr. President, I would like to nominate one of the hardest working men in our Association, Dr. Frank C. Owens. (This motion was seconded)

DR. EVATT: (Recognized) I move the nominations be closed and Dr. Owens be elected by unanimous vote.



(This motion was seconded, the vote was taken and it was unanimous.)

THE CHAIR: We will instruct the Secretary to notify Dr. Owens he has been elected alternate delegate to A.M.A.

The next election will be the election of councilors for three year terms. There are three Districts coming up, the Third District (The Term of Dr. C. J. Scurry expires); the Sixth District (The term of Dr. J. P. Cain, Jr., expires); the Ninth District (The term of Dr. John M. Fleming expires). This election will be for the Councilor, Third District, Dr. C. J. Scurry's term expiring.

DR. ROBERT WILSON: I would like to nominate Dr. Scurry to succeed himself.

(This was seconded; motion was made that the nominations be closed; this was seconded by Dr. Hall, and that Dr. Scurry be elected by acclamation to succeed himself; the vote was taken, passed and it was so ordered.)

THE CHAIR: Dr. Wilson, will you notify Dr. Scurry that he has been re-elected.

The Sixth District, the term of Dr. J. P. Cain, Jr. expires, are there any nominations?

DR. PRIOLEAU?: I would like to nominate Dr. William Perry of Chesterfield.

(This was seconded by Dr. Evatt; motion was made that the nominations be closed and that Dr. William Perry be unanimously elected; this motion was seconded, voted on, passed.)

THE CHAIR: The Secretary will cast a unanimous ballot for Dr. William Perry, and notify him of his election.

COUNCILOR, 9th District, the term of Dr. John M. Fleming expires.

DR. LESENE SMITH (Recognized) Mr. President, I would like to nominate Dr. Fleming to succeed himself. (This was seconded; motion was made that the nominations be closed and that Dr. Fleming be elected unanimously to succeed himself, this was seconded by Dr. Hanckel, the vote was taken and passed.)

THE CHAIR: Dr. Wilson, I instruct you to notify Dr. Fleming that he has been re-elected.

The next election is that of the members of the Mediation Committee, 3-year terms. In the Third District the term of Dr. Martin M. Teague expires; Sixth District (The term of Dr. Walter R. Mead expires); Ninth District (The term of Dr. Harold P. Hope expires)—the members of the Mediation Committee are nominated by Council and the nominations are on the blackboard: Third District, Dr. Martin Teague, Dr. R. C. Christian—Sixth District, Dr. Frank Owens and Dr. Sam Cantev—Ninth District, Dr. Harold P. Hope and Dr. R. Lee Sanders.

DR. WESTON (Chairman of Tellers) As Chairman of the tellers I request that they be put on separate ballots.

THE CHAIR: While the ballots are being counted we will continue with the elections. The next are Members of the State Board of Medical Examiners—4-year terms.

Second Congressional District (The term of Dr. Kirby D. Shealy expires). Are there any nominations?

DR. R. LEE SANDERS (Recognized) I wish to nominate Dr. Shealy to succeed himself. (This nomination was seconded several times; Motion was made by Dr. Hall that the nominations be closed and that Dr. Shealy be elected unanimously. This motion was seconded.)

THE CHAIR: It has been moved and seconded that the nominations be closed and that Dr. Kirby D. Shealy be elected by unanimous consent. (The vote was taken, passed, and it was so ordered.) I will ask the Secretary to notify Dr. Shealy of his re-election. The next office to be filled is the Member from the

Fifth Congressional District of the State Board of Medical Examiners, (The Term of Dr. Roderick Macdonald expires)

DR. JOHN BREWER (Recognized) I nominate Dr. Macdonald to succeed himself; (Dr. Owens made a motion that the nominations be closed and the nominee be elected by acclamation; this was seconded, the vote was taken, passed and it was so ordered.)

THE CHAIR: The next office to be filled is that of Hospital Advisory Council, and I would like to have Mr. Meadors say a few words about that to you. Mr. Meadors.

MR. MEADORS: Gentlemen, that election does not appear on the printed program. The reason is, this is to fill an unexpired term. Last year there was an election to succeed the term of Dr. William Cantev, which expired at that time, and the nomination was made by the House but there was no appointment by the Governor. Therefore the term was not filled. This is to fill a position on the Hospital Advisory Council, formerly held by Dr. William Cantev.

DR. BURNSIDE (Recognized) I nominate Dr. Tucker C. Weston, Jr., Columbia.

(Motion was made that the nominations be closed; and this motion was seconded.)

THE CHAIR: All in favor of Dr. Tucker Weston's election by acclamation signify by saying "aye". (This motion was carried and it was so ordered.)

It was requested that immediately at the close of the meeting that Dr. Weston, Dr. Cain, Dr. Wilson, Dr. Evatt and Dr. Stokes come to the platform for pictures. The next order of business is selection of place for the 1960 Annual meeting, I would like to have invitations or suggestions.

DR. DECHERD GUESS (Recognized) The manager of the Poinsett Hotel, J. Mason Alexander, has written a letter inviting the South Carolina Medical Association to hold their 1960 meeting in Greenville and to make the Poinsett Hotel their headquarters, and therefore, I want to, on behalf of the Manager of the Poinsett Hotel and on behalf of the Greenville County Medical Society, invite this group to meet with us next year, and that is an invitation that is very sincere and from the heart, although it may have been prompted by commercial consideration.

THE CHAIR: Do you think they have facilities in the hotel to hold this meeting?

DR. GUESS: We can do it, yes, we have a new auditorium, gentlemen, and actually the meetings of the Association will be in the Memorial Auditorium which will accommodate even larger groups, with committee rooms, adequate, etc.

THE CHAIR: Do we have any other invitation?

DR. BLANTON (Recognized): Last year when we had our meeting at Myrtle Beach and it was decided at that time that we would come to Columbia, one of the reasons given for it was that Columbia was a better, more central location and they felt that more doctors from the upper part of the state would not have so far to travel. I live about as far as any from Myrtle Beach, but it gives me no hardship, I look forward to it, I like it and I move we meet at Myrtle Beach next year.

(This motion received several seconds)

THE CHAIR: Are there any further invitations? (There were none) At this time the only motion before the house is to go to Myrtle Beach. Dr. Guess did you make your invitation in the form of a motion?

DR. GUESS: I did not do it, I extended an invitation, but I will move you sir that the Association accept the invitation and that we meet at Greenville, next year. (This was seconded.)

THE CHAIR: The motion that we meet in Myrtle Beach was actually made first, so we will now vote on that motion.

**NOW SHE  
CAN COOK  
BREAKFAST  
AGAIN**



**... WHEN YOU PRESCRIBE NEW**  
**MORNIDINE<sup>TM</sup>**  
(BRAND OF PIPAMAZINE)

A new drug with specific effectiveness in nausea and vomiting of pregnancy, Mornidine eliminates the ordeal of morning sickness.

With its selective action on the vomiting center, or the medullary chemoreceptor "trigger zone," Mornidine possesses the advantages of the phenothiazine drugs without unwanted tranquilizing activity.

Doses of 5 to 10 mg., repeated at intervals of

six to eight hours, provide excellent relief all day. In patients who are unable to retain oral medication when first seen, Mornidine may be administered intramuscularly in doses of 5 mg. (1 cc.).

Mornidine is supplied as tablets of 5 mg. and as ampuls of 5 mg. (1 cc.).

G. D. Searle & Co., Chicago 80, Illinois.  
Research in the Service of Medicine.

(The vote was taken and it carried almost unanimously)

THE CHAIR: The ayes have it and it is so ordered, the next meeting in 1960 of the South Carolina Medical Association will be at Myrtle Beach.

REPORT OF THE TELLERS—Mediation Committee.

THE CHAIR: I will now announce the election of the Members of the Mediation Committee:

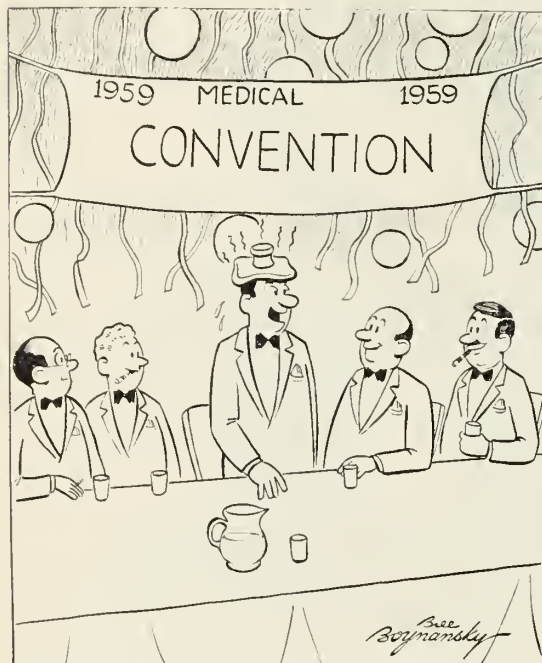
Third District—Martin Teague, M. D.

Sixth District—Sam Cantey, M. D.

Ninth District—Harold Hope, M. D.

Is there any further business.

Is there a motion we adjourn? (Motion made, seconded and passed.) The House of Delegates is Adjourned.



"Fellow association members, as we come to the close of this our greatest convention . . ."

#### SOUTH CAROLINA OBSTETRICAL AND GYNCOLOGICAL SOCIETY MEETING

Hotel Columbia, Columbia, S. C.

Monday, October 12, 1959, 10:00 A. M.

(The meeting will include morning and afternoon sessions, with a Dutch Luncheon at 1:00 P. M.)

##### Speakers:

Frank R. Smith, M. D.

Professor of Clinical Obstetrics and Gynecology

Cornell University Medical College

"Carcinoma of the Vulva"

H. Hudnall Ware, Jr., M. D.

Chairman, Department of Obstetrics and Gynecology

Medical College of Virginia

"Diagnosis and Treatment of Ectopic Pregnancy"

Also case reports and papers by members of the South Carolina Obstetrical and Gynecological Society.

#### JOINT MEETING OF THE COLUMBIA MEDICAL SOCIETY AND THE SOUTH CAROLINA OBSTETRICAL AND GYNCOLOGICAL SOCIETY

Hotel Columbia, Columbia, S. C.

Monday, October 12, 1959, 7:00 P. M.

7:00 P. M.—Social Hour

7:45 P. M.—Dutch Dinner

8:30 P. M.—Scientific Session

##### Speakers:

H. Hudnall Ware, Jr., M. D.

"The Doctor's Responsibility in Pre-Marital Counseling"

Frank R. Smith, M. D.

"Development of Present Day Treatment of Cancer of the Cervix"

(A cordial invitation is extended to all interested physicians to attend these meetings.)

#### ADVERTISERS

Abbott Laboratories  
Ames Company  
Appalachian Hall  
Ayerst Laboratories  
Bayer Aspirin (Glenbrook Labs.)  
Benton Laboratories  
Blue Shield  
Brawner's Sanitarium  
Burroughs-Wellcome & Co.  
Carrtone Laboratories, Inc.  
Charles C. Haskell Co.  
Davies, Rose & Co., Ltd.  
Drug Specialties  
Eli Lilly & Company  
Endo Products, Inc.  
Estes Surgical Supply Co.  
Geigy Pharmaceuticals  
Highland Hospital  
Jones & Vaughan, Inc.  
Kent Cigarettes  
Lederle Laboratories  
Mayrand, Inc.  
Medical College of Georgia  
Merch, Sharp & Dolme  
Parke, Davis & Company  
Pfizer Laboratories  
Physicians Casualty Company  
Physicians Products Co.  
Pinebluff Sanitarium  
Professional Management South  
Purdue Frederick Co.  
Reid Laboratories  
A. H. Robins Co., Inc.  
J. B. Roerig & Co.  
Sandoz Pharmaceuticals  
Schering Corporation  
G. D. Searle & Co.  
Smith-Dorsey  
Smith, Kline, & French  
E. R. Squibb & Sons  
United States Brewers Foundation  
Wallace Laboratories  
Wampole Laboratories  
Waverley Sanitarium, Inc.  
Winchester Surgical Supply Co.  
Winthrop Laboratories, Inc.  
World Insurance Co.



*Tumors of the Nasopharynx.* Laryngoscope 69: 415-421, April 1959—R. W. Hanckel, M. D.

The benign and malignant tumors are discussed as to their pathological classification and their incidence in different age groups. Of interest is the point brought out that these tumors are of high frequency in the Oriental people, especially the Chinese.

Symptoms and diagnosis are outlined, as well as the prognosis and treatment.

Three case reports are presented to show how juvenile fibromas can vary in the degree of involvement. Finally, three cases of malignant lesions are presented to illustrate the usual course of extension of the lesion, and the bizarre neurological symptoms which result therefrom.

A. L. Feuer, M. D.

## ESTES SURGICAL SUPPLY COMPANY

Phone WALnut 1700-1701

56 Auburn Avenue

ATLANTA, GA.



# JUST ONE TABLET DAILY

provides therapeutic levels . . . for 24 hours . . .  
with low incidence of sensitivity reactions . . .

WHENEVER SULFAS ARE INDICATED<sup>®</sup>

# KYNEX

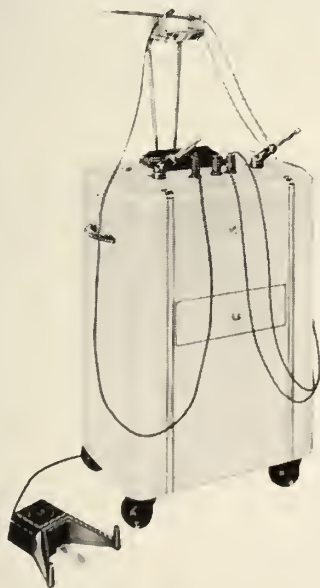
Sulfamethoxypyridazine Lederle

0.5 Gm. TABLETS/NEW ACETYL PEDIATRIC SUSPENSION

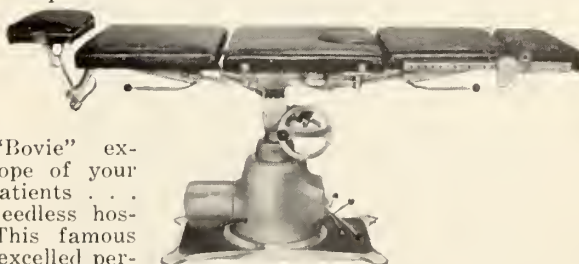
LEDERLE LABORATORIES, a Division of  
AMERICAN CYANAMID COMPANY, Pearl River, New York Lederle

## RITTER... the finest for the profession!

The Ritter Universal Table enables you to treat more patients more thoroughly, with less effort in less time. Here is the ultimate in examining table flexibility . . . easy to position . . . more comfortable for patients.



OFFICE "Bovie" expands the scope of your services to patients . . . saves them needless hospitalization. This famous unit offers unexcelled performance and dependability.



# W i n c h e s t e r

CAROLINAS HOUSE OF SERVICE



**Winchester Surgical Supply Co.**  
119 East 7th St. Tel. 2-4109 Charlotte, N.C.

**Winchester-Ritch Surgical Co.**  
421 W. Smith St. Tel. 5656 Greensboro, N.C.



Of special  
significance  
to the  
physician  
is the symbol



When he sees it engraved  
on a Tablet of Quinidine Sulfate  
he has the assurance that  
the Quinidine Sulfate is produced  
from Cinchona Bark, is alkaloidally  
standardized, and therefore of  
unvarying activity and quality.

When the physician writes "DR"  
(Davies, Rose) on his prescriptions  
for Tablets Quinidine Sulfate, he is  
assured that this "quality" tablet  
is dispensed to his patient.

Rx Tablets Quinidine Sulfate Natural  
0.2 Gram (or 3 grains)  
Davies, Rose

*Clinical samples sent to physicians on request*

Davies, Rose & Company, Limited  
Boston 18, Mass.

Q-7



# in Acne

Routine cleansing with pHisoHex augments standard acne therapy. "No patient failed to improve."<sup>1</sup> pHisoHex helps check the infection factor in acne. Used exclusively and frequently, it will keep the skin surface virtually sterile. Contains 3 per cent hexachlorophene.

# pHisoHex<sup>®</sup>

(antibacterial detergent, nonalkaline, nonirritating, hypoallergenic)

**tips the balance for superior results**

Winthrop LABORATORIES  
New York 18, N. Y.

1. Hodges, F. T.:  
GP 14:86, Nov., 1956.

# The Journal

of the

## South Carolina Medical Association

VOLUME LV

October, 1959

NUMBER 10

### WHITHER MEDICINE?\*

HERBERT S. ALDEN, M. D.

Atlanta, Georgia

**T**o be asked to speak before one's peers is both an honor and a pleasure which cannot be denied, nor evaded. To protest my inadequacy would be a poor note of confidence in those who got me into this fix. My job is to captivate my captive audience.

However, having chosen my subject, I have become overwhelmed with the depth and breadth inherent in the question, whither medicine? In a broad sense, medicine must be responsive to all economic and social forces. Comprehensive medicine includes the sciences of ecology, biology, public health, and the many expensive and complicated research instrumentalities and institutions, as well as the laboratories, hospitals, and nursing and medical education. Comprehensive medicine involves developments on many fronts, such as, the unprecedented increase in population—the growing power and influence of labor unions in the public health sciences—the rendering of medical service in the presence of an insurance intermediary—the role of medicinal industries, and of government in medical research—the economics of day to day practice of medicine, as well as the increase and use of technological advancements, such as atomic radiation and x-ray. It now includes the problem of geriatric medicine, the mental and the physically handicapped, and finally it

must find wisdom to advise in the better leisure of a growing affluent society. To begin with, then, I find I must limit the meaning of the word, "medicine" to that which is practiced by the physician in direct relation to patients, and not carry you into a confusing extension of the range of medicine, into the biologic sciences, hygiene, public health, and sanitation.

In a broad sense, medicine has made continuous efforts to improve its practice, and its science in the healing of the sick, and in doing so, it has, to a large extent, been nurtured on charity and benevolences. However, in the recent past, while comprehensive medicine has advanced in public esteem in nearly all fields, the individual doctor has suffered much waspish criticism and accusations, until in a collective sense he is no longer the beloved physician. But in spite of this criticism, medicine finds itself the surprised recipient of almost too much faith from the layman.

How did we get in this predicament? If health is to be regarded as a social requisite and right, and the physician regarded as responsible for health, then how are we to keep the public faith, and yet remain independent in thought and action? These questions are being asked of us from all sides. The answers do not come easily, and I do not think they are found either in complacency, or in our conventional wisdom of the present day.

Let us think together on these questions—

I must assume that I am speaking for and to those of us who are members of that uneasy

Associate Professor of Medicine (Dermatology), Emory University School of Medicine, Atlanta, Georgia.

Read before the Charleston County Medical Society, January 13, 1959.

\*"Pilot Study on Whither Medicine", New York Academy of Medicine—Iago Galdston, M. D., Secretary and Editor.



middle generation who, forbidden by age to be modern, and reluctant to be mellow, have a guilty feeling that we are in part responsible for some of the discomforts, and some of the problems that face us in the practice of medicine in the midst of the Twentieth Century. It should be a challenge to us in our present day complacency to remember the warning of the philosopher Santayana that, "He who is disposed to ignore history must be prepared to repeat it." So let us not be deceived. The problems we face today have been accentuated and colored by the social and economic dislocations of our changing order, but they may have been a long time in the making.

I think some of the fault may lie in our attitude toward education. Could it be that our scientific knowledge has so far outdistanced philosophy and religion that it has ceased to be a unifying force in medical education? Those of you in Charleston are fortunate that as medical practitioners, and as residents of the Carolina low country and surrounding counties, you are in a real sense closer to those enlightened men of the late 18th and 19th Century who formed and guided our Nation in its early years. The names of Pinckney, Middleton, Huger, Rutledge, Izard, and many others are not only on your street corners and in your historical halls, but are remembered as among the founders of the Western Culture. The men of this period and those who produced our American Constitution and Bill of Rights were educated in institutions and homes in which the classic works of a culture derived from Greece and Rome, and tintured with Christianity were the substance of their curriculum. They regarded themselves as inviolable persons, because they were rational and free. By rational, they meant that they were capable of comprehending the moral order of the universe, and they regarded themselves as free, because of a personal moral responsibility to perform their duties, and to exercise their corresponding rights. The transmission of this culture was one of the chief aims of their educational system. In recent years, however, education seems to deny that it is either necessary, useful, or desirable to transmit this religious, classical culture to our youth. The official historian of Harvard Uni-

versity called this "the greatest educational crime of our Century against American Youth—depriving him of his classical heritage." Thus, there is within our school curriculum an enormous vacuum where a few decades ago there was some form and substance. This vacuum has been filled with the "how to" courses (so characteristic of modern medical education), the electives, and the specialized courses, as well as with the improvisations and little curiosities of both teacher and students. With this has come the innumerable half-truths masquerading in print as whole-truths, and with many untried judgements which have begotten fears, inward fears from which there is no haven of religious culture, or tradition, no common faith, and no common moral intellectual discipline. It appears sometimes that we have renounced the idea that a student must learn to first understand himself and his fellow man, and what they are, so that he can live in a world bound together by some common principles, or at least to have some knowledge of whither he is going. We, as inheritors and executors of this lack of substance in our education, thus, are in ignorance of the social consequences of certain types of conduct that can follow in this lack of religious, classical culture.

But, we are also inheritors of a certain Social Darwinism, so ably espoused by Herbert Spencer in the 1870's—the survival of the socially fittest, wherein we believe we must compete with each other in any manner in which we see fit, right or wrong, in a mere struggle for existence and economic security. It was in this same year that Dr. Jacob Bigelow of the Harvard Medical School told his graduating class to have no fear of the inadequacy in their profession, since in the two years of their medical course they had learned all there was to know about medicine and surgery. So, medicine, like spices of olden times, which was a monopoly of the Merchants Guild, came to have the nature of a commodity, available only to those who had the wit and the money to obtain it. The rest of mankind must do without as best it could. But today no one believes that a medical education could be obtained in two years of study, and there is now widespread demand for good

medical care at the lowest possible cost. So, it is now obvious that medicine cannot solely govern itself, or its progress simply by profit and loss motives, nor can it excuse ignorance, nor compromise with the quality of its service.

In the early 1900's we formulated the philosophy of the "American Dream" which in essence is that hard work, thrift, and competitive struggle would result in individual salvation. This idea, however, arose from a world of poverty and inequity in which there was not enough goods, or services to go around. The American Dream tied to Social Darwinism produced the "robber barons", and the malefactors of great wealth of the early years of the Twentieth Century. Nowadays, in spite of the harsh facts of our present life, the conventional wisdom still clings to this concept for American success. We cannot say that the medical profession has remained aloof to this philosophy, and even though Social Darwinism has been supplanted by an enlightened socialism it remains an obvious part of us, and I think accounts for some of the bitter accusations thrown at us.

We are also inheritors and executors of the cult of "specificism" in the etiology of disease, and its therapy. Fifty years ago in what has been spoken of as "The Golden Age of Medicine", contagious diseases, syphilis, tuberculosis, malaria, and typhoid fever were obvious to all, and medicine was deliberately and invariably fixed on disease, and not on health. The discovery of bacteria led us to the "dynamic" conception that if there was a specific disease there was a specific cause, and a specific cure. Thus, was born the idea of the "magic bullets", and doctors became concerned with health in a negative sense, as an absence of disease. This concept of conquest of disease in its simple form was, and is now popular among physicians as well as among the laity. Conventional wisdom believes that one discovers the malignant agent of disease, and with some "magic bullets", or now some "wonder drug", like a modern guided missile finds the noxious agents, destroys them, and eliminates disease, producing its corollary, health. But let us be honest with ourselves, we have only a very few specifics, and only a few "magic bullets",

and some of these are in bad repute. It is also doubtful whether the medical man has conquered but very few diseases. He can lay claim to that only if he includes all the biological sciences, hygiene, and the efforts, and magnificent results of the sanitation engineers. Such conventional wisdom may have been a comforting philosophy at the beginning of the Twentieth Century when Sir William Osler was singing of "Man's Redemption of Man" by the conquest of disease, but it will not answer the medical demands of the 1950s.

We are inheritors and enlargers of the medical specialists (in some instances also executioners). It may not be pleasant, or flattering to the proctologist, the oculist, the dermatologist, or orthopedist to know that from the Middle Ages down to the present time they were in the main outside of the practice of medicine, and were mountebanks, quacks, and sharpers of every kind and variety. They, as now, were no doubt men of great skill, dexterity, and much practical, if not academic knowledge and wisdom. They plied their specialties long before medicine became so diversified. The specialist is not as contemporary wisdom would have us believe, the logical result of scientific progress, he is a negative practitioner of medicine, in that he does not practice comprehensive medicine. In spite of our humble beginning (and mayhap because of it) we specialists tend to have an illustory feeling of superiority which is not founded on fact. Diseases have not been conquered by the clinical and surgical specialties, but by the ecologists, the physiologists, and the sanitary engineers—we only use, and improve on their discoveries.

In effect, the conquest of disease has produced the "partial death" of many specialties. Where is the syphilologist today, the surgeon that depended on gonorrhea? The surgical otologist? Dermatology, one of the earliest specialties, has lost more ground than most. It now practices cutaneous medicine. It is true that the specialist has sought to bolster himself, his training, and ability by the self-imposed examinations, letters of abbreviations that sound like degrees of education, and now by the device of the medical specialty boards. In defense, he has even made the general



practitioner into a form of a "specialist", and for self protection the medical man has developed the "group practice". While more in line with our era of socialism, it implies what is indeed a falsification. It reverses the former dictum that the whole is greater than some of its parts, and implies that the sum of the parts is equal to the whole. While conventional wisdom thinks of the group clinic as the acme of comprehensive medicine, reality decrees that it is a deliberate structuring of "basic specialties" in a cluster pattern. Group practice is not great medicine, but more likely another example of the "togetherness" so often extolled by the modern organization man. Group practice can lead to conclusions in which no one takes the rap, or to "cookie cutter" conformity, and to the place where the "positive power" of the "lone think" is lost.

So, now we find ourselves in a wholly different world than that of fifty years ago. They have been fifty years of unprecedented change in every phase of our society, in our surroundings, our science, and our economics. So much so that nowadays no individual man is able to cope with the enormous complexities in which he is enmeshed. We have come from a nation of poverty to a nation of plenty—from a few rich to the many affluent. We have arrived at an economy which has superfluity of the necessities of life, and now are obliged to advertise the gee-gaws, the newest automobiles, and the unessentials, in order to rid ourselves of the overproduction. No ad-man in the 1900s had to tell folks what they needed. They knew what they wanted. We have moved from a little government to a great government, and the rich and powerful tycoon has been replaced by Uncle Sam in Washington City. The power over business once had by the rich has been transferred to the labor unions, and to the government, who now exercise much of the control.

We are now in the age of "organization man", and worship "togetherness", and have become silent in the crowd. We have come under great pressure to conform. Security has replaced adventure. Intellect is in the discard, and politics are now dictated by a cult of mediocrity. Conformity in all things is the watchword. You and I, nurtured on individual-

ism, however, still cling tenaciously to the personal practice of medicine, and are all but overwhelmed by the pressure of this conformity. But there is some evidence that we may be moving away from complete conformity. The recent heated discussion of segregation versus integration is an example. Some seem to think that an enlightened individualism is really what we want—not an integrated conformity in our public education. Yale's President Griswold in June of last year, spoke of "cultural submission—that tide of organization in our private life which may engulf the last surviving instinct to preserve the safeguards of individual freedom—the endless, sterile, stultifying conferences, held in substitution for independent inventiveness—it conjures a nightmare picture of a whole nation of "yes men", of hitchhikers, eavesdroppers, and peeping toms, tiptoeing backward offstage, with their fingers to their lips." There is another straw in the wind of change in a new advertising slogan for cigarettes: "A thinking man's filter, and a smoking man's taste".

It is quite clear that these changes have been brought about by a great social and economic upheaval in which the medical profession, as such, has counted for very little in the final result. We, physicians could not, and cannot do but very little to alter the social and economic changes now taking place. Health is now accepted by many as socially derived, socially affected, and as a social right, in the same manner as liberty, education, and the pursuit of happiness. The medical profession has come to be a handmaiden of health, rather than the sole dispenser of it. Comprehensive medicine has been moving out of the long dark centuries of mysticism and empiricism into a brighter era of science in the cure of disease, and is now well advanced into the present period when prevention is supplanting treatment of disease.

However, there is one area in which the medical profession has in the past, and now can exercise great influence. This is in the field of medical education. Government and business and labor unions may dictate many phases of medical practice in licensing laws, in public health, and in insurance coverage,



but medical education is still in the hands of the medical profession. The medical practitioner may be suffered by other agencies, because he is needed—but he is still needed by his patients, and by his students, and I think this will always be so.

Let us then turn to a critical evaluation of medical education, as it appears today.

Medical education, like humanity, suffers both from tradition and progress. It is full of traditions. Medical education is Dr. Mark Hopkins astraddle one end of the curricular log, and the student on the other. It is Sir William Osler teaching at the bedside. It is the lecture on "The Virtue of Medicine as a Profession" by Dr. Edward L. Keys. It is the all night vigil, and the early morning call. It is the deep pleasure at allaying the fears in time of stress, and it is the always new, and endearing wonderment of man to be able to withstand a beating from disease and accident, and then come out well and whole. It is also the sadness of the losing fight. It is the willingness to take the biochemist's inventions, and use them for the betterment of the ill. It is the graceful way you save a life by your knowledge and dexterity, but let the credit go to others, so that they may emulate both your abilities and your graciousness. All these and many more traditions come to mind. They are the hidden wealth of our medical colleges, and they are kept in trust by generations of medical teachers. They cannot be bought by kings, or politicians.

But progressive medical education must teach the medical student of the day, in terms of the changing order of the times, and not in terms of what he was, or that which he is to be. It can only partially equip him to meet the responsibilities and obligations of the future. It, therefore, needs continual study, and revision of the curriculum, but since the training of the medical student begins in his pre-medical years, that too, needs study and revision by us medical educators. I have already referred to the fundamental lack of cultural classical education. However, the medical faculty must, in a broad sense, take in the student what it can get, and not always what it wants. We may have to follow big business companies in "hiring" college stu-

dents, more for why they chose the field of medicine, their interest and enthusiasm, rather than their experience in biology, or chemistry, or high scholastic grades. But we have come a long way in pre-medical attainments since Daniel Drake, over a hundred and twenty five years ago, remarked that if a son of a family was too indolent to labor on the farm, or in the work-shop, too stupid for the bar, or too immoral for the pulpit, then the medical faculty could make of him a physician.

Stung by the implications inherent in the Pure Food and Drug Act, the Flexner report on medical schools in the United States, the teaching example of Sir William Osler, and others of his kind, medical education in the United States has changed radically, and come along faster than you and I of this middle generation can barely comprehend. The haste in enlarging medical education, however, only mirrors the haste in the equality of opportunity in general education. This rapid and insistent progressive education may have delivered quantities of information to quantities of people, but it sometimes seems to have succeeded only in producing a generation of mental slatterns. The student, both medical and otherwise, seems to be literate only in a formal sense—that is, he is capable of putting the letters c-a-t together to form a word, "cat". But he is not literate in the sense that he is able to derive from these letters any clear mental concept of the animal itself. How striking this analogy is to the unimaginative diagnoses of clinical groups. Putting together the electrocardiogram, the x-ray report, the blood chemistry and blood count, a diagnosis is "spelled out" just as is the word "cat". The diagnostic group unwittingly becomes guilty of that ancient abdication of reason—the heresy, that to *name* is to *know*. Giving a name, or spelling out a diagnosis is only the beginning of wisdom and learning, not the end. This is a special fault of the dermatologist who often seems to have never escaped from the ancient priesthood-physician belief that naming a disease gave control.

Thus, in our haste to produce scientific doctors we have taught more of the "how to" than of the "why for", and we seem to have lost sight of the student's soul and his imagination,

and neglected to teach critical judgement. It is this lack of critical judgement that I think may have prompted a remark from a junior medical student. Coming out of a medical lecture, he appeared a bit put out. I asked him how the lecture had gone. "It was lousy" he said "I expected some pearls of wisdom, and all I got was advice on how to think of the patient." I suspect this student had no knowledge of that part of the Golden Rule, "Give not that which is holy unto the dogs, neither cast your pearls before swine."

Such a lack of basic interest in inner resources, so apparent in our present day medical students, led Dr. Max Obermayer, in an address to the Society of Investigative Dermatologists, to say "It is with the exercise of critical judgement that I am most concerned. The art of medical practice consists chiefly in the judgement regarding the appropriateness of concepts in etiology, diagnosis, treatment, and prognosis. How can there be a good medical judgement when a person is incapable of independent judgement in other spheres? We are in this respect at a particular disadvantage, because in our democratic society there are tremendous pressures toward uncritical conformity. The leveling tendency is always downward, for an egalitarianism denotes the lowest common denominator. Too few dare the rigors of independent thought—whatever the subject—many who so venture have to pay a high price for their courage. The result is that our average young physician is not an interesting person. He is self-complacent, comfort-loving, and un-enterprising, and his smug attitude is sometime coupled with a colossal ignorance, as well as, a lack of curiosity about anything not pertaining to the immediate, and only goal, i.e., the successful passing of the examination to the American Board of his specialty—his understanding of human nature is often superficial, he does not realize that "normal" has wide range of sexual and moral spheres—the paucity of knowledge outside the immediate field of interest is exemplified in the hesitancy to express an opinion on a question involving general medicine in round table discussions with his colleagues."

But you may say, "why belabor this portion of medical education?" It is because I am

aware that the scientific and research side of medical education will continue to advance in both quality and quantity, and its surgeons and internists and dermatologists will probe deeply into man's vitals, and work wonders with the help of the biochemists, and the physicists. But I fear the very weight and size of this medical science will take an increasing toll of the years of early manhood to the exclusion of a preparation for the physician to live *with* himself, and *with* his fellows, and prepare him only for working *on* them.

But what of the future? How can we anticipate the scope of medical practice in the face of the rapid growth and knowledge, and increasing population? It appears that the crux of these matters lie in the hard answer to one of the questions I asked in the beginning. Is health to be regarded as a personal, professional prerogative, or is it a social requisite and right?

In recent times it is becoming increasingly clear that health has come to be a social right, and will be an increasing public burden. One has only to read the general assumptions, and some of the facts published in the final report of the committee of the Consultants in Medical Research and Education from the United States Department of Health, Education and Welfare which was published in June of last year. Hold it in the light of the recent economic and sociologic studies on the future population of the United States, and the answer is clear. It is more and more of the same—shortage of doctors, higher patient loads, less hospital beds, and more insurance, and government intermediaries between doctor and patient.

Health control without birth control, among other items, has helped to skyrocket the population increase far beyond the estimates of five years ago. Look at the astronomical figures: (1) By 1970 over two hundred and fifteen million people, or a 26% increase in the present figure. (2) The facts of future birth and death rates will, it is estimated, produce in this population a large percentage of persons under twenty, and over sixty-five. One half of the population will be non-productive, either retired, or in school, and will present special medical problems. It appears the gen-



eral population is getting older, but not wiser. (3) To maintain the rate of a hundred and thirty-two physicians per one thousand population (a remarkable constant figure for the past thirty years), a minimum of one thousand and two hundred additional physicians a year must be produced, or imported. At least fourteen new medical schools will be needed in the next eleven years. While construction demands are of unprecedented dimensions, the production, or creation of faculty and teachers for a medical school in eleven years is of greater dimensions, even if we deliberately destroy the quality of medical education.

While we are not wholly lost, as yet, it seems obvious that there will be fewer doctors, and more people in 1970. That means for you, and for me, more work load, and maybe a relatively smaller income, and certainly more intermediaries, government and otherwise between us and the patient. Will the public be content, or satisfied with relatively fewer physicians? There are some signs that they will, and one of the greatest signs seems to be the increasing efficiency of the medical profession to meet the needs rather than the demands of the general public.

Since the medical profession, historically, nor currently, can do very little to either retard, or mould the economic and social changes we are experiencing, and since we still have much control over the quality of medical education, it follows that it is in this field that our chief efforts must be made. I, therefore, ask you to think deeply and realistically about methods and means of exerting your influence in medical education. Do you wish it broader and larger by diluting its quality? Do you wish it likened unto a piney woods swamp, all over creation, and only knee deep anywhere? Or, do you wish it deeper, and more intensive, so that your services will be needed for greater things, rather

than demanded for smaller complaints?

I may have more confidence in my profession than some appearances sometimes warrant, but I believe the individual physician can, and will, by intelligently utilizing improvements at hand, and by their personal attention to their patients, teach the need of balanced judgement in the particular case, and show that common sense is often a safer guide than theoretical, organized group knowledge.

But, I think you and I have a greater stake in seeking the best of answers, since no matter how much the medical needs of an increasing population is underestimated, we are bound to be overworked in the future.

I, therefore, believe that a restatement of what I think are the central principles of the Western philosophy of life are long past due, but never too late: *first, that man's reason is the ruler of his appetite; second, that love manifests itself in loving service; and third, that happiness is liberty in bondage.* Since the practice of medicine is learned in only two ways, by error, and by teaching, we all should be dedicated to a continuous and repetitious education; education of ourselves, the patient under our care, and of the public and the student, if by none other than by example and emulation. How else can we, as individual physicians control, or mould the future?

I should like to close this dissertation with a quotation from an address by the late Dr. Edward L. Keyes to the medical students at Cornell University. I quote, "Fear not to give of time and enthusiasm, and life itself to your profession. Let truth and fidelity and gentleness be the coin of your realm, and the gates of State medicine will not prevail against you. The great physician of every tomorrow, like the great physician of yesterday, will be he who spends himself most in giving. It is returned to him a hundred fold in the affection and adoration of his fellow man."

#### REFERENCES

- Galdston, I.: The birth and death of specialties. J.A.M.A. 167:2056, 1958.  
Alden, H. S., Jones, J. W., Nippert, P. H.: Undergraduate instruction in dermatology—a critique. A.M.A. Arch. Dermat. 69:1, 1954.  
Williams, D. H.: A "blueprint" for the teaching of undergraduate dermatology. A.M.A. Arch. Dermat. 75:317, 1957.  
Lippman, W.: Education vs Western Civilization.  
Obermayer, M. E.: The dermatologist as an individual—an appraisal of cultural trends. J. Invest. Dermat. 29:241, 1957.  
Hamilton, E.: The Echo of Greece. New York, W. W. Norton & Co., 1957.  
Alden, H. S.: Medicine on trial. South. M.J. 51:778, 1958.



# THE GREENVILLE COUNTY MEDICAL SOCIETY HISTORICAL SKETCHES

## 3. EARLY TWENTIETH CENTURY MEDICINE

J. DECHERD GUESS, M. D.

This is the third of a series of articles, adapted from the book *A Medical History of Greenville, South Carolina*, written by the same author, and which will be published by the Greenville County Medical Society in 1959.

The South Carolina Medical Association was inactive during the Civil War years. An effort to reactivate it was made in 1869. A meeting was held in Spartanburg. However, little interest was aroused. Greenville was represented at this Spartanburg meeting. This seems to have been the first meeting of the State Association to be attended by representatives from Greenville.

The American Medical Association had been organized in 1847. South Carolina was represented at the organizational meeting, and Dr. James Moultrie was elected vice president of the new organization. Dr. S. Henry Dickson was made chairman of the Committee on Medical Sciences.

The original American Medical Association was not a confederation of constituent state associations. Neither was the South Carolina Medical Association a confederation of county societies until after a revision of its constitution in 1904. Originally, membership in the State Association included all graduates of the Medical College of South Carolina and all other doctors who could satisfy the Council of the Association regarding their medical education.

The fact that membership in the State Association did not necessarily come through membership in a county society possibly accounts for the fact that an annual meeting of the Association was held in Greenville in 1888, three years before the Greenville County Society was chartered in 1891. It seems, however, that there had been a county society of some type before 1891. Dr. J. Warren White in his article, "A Brief History of Greenville Medicine," which was included in the centennial volume *A Brief History of the*

*South Carolina Medical Association*, tells of a conversation with the late Dr. C. T. J. Giles. Dr. Giles spoke of a reorganizational meeting of the county society sometime in 1892 (1891?). It seems that about 29 doctors met in the offices of Dr. T. T. Earle and reorganized the society. Dr. Giles stated that after the reorganization, the society held regular monthly meetings.

In 1881, the first year of required registration of doctors in the offices of the clerks of court in their respective counties, 51 doctors registered in Greenville County. Thirty-four of these lived within the city of Greenville. The population of the city in 1880 was 6,160. There were 800 registered doctors in South Carolina in 1882. Half of the registered doctors in Greenville County at this time were graduates of the Medical College of South Carolina. That ratio has persisted pretty well to the present time.

It was still the horse and buggy days or, more probably, in the red clay hills of the county, the horse and saddle days for the doctors. However, an invention had been introduced which was destined to affect the pattern of medical practice immensely. The telephone became available in 1876. Its introduction was not accepted with enthusiasm by doctors generally.

A story is told which illustrates their attitude. A group of Greenville doctors were in the midst of a weekly poker game when the telephone rang. One of the group was called to the phone. What his colleagues heard went something like this:

"Yes, I am Dr. Doe . . . No, I am very sorry, but I can not come out right away . . . No, I am tied up and can not possibly get away . . . Perhaps, in the morning, if you can wait so long."

The doctor explained that the call was from

a new family recently come to town. The people were rather well to do, but he said that he did not care to practice for a family which had a telephone.

The South Carolina Medical Association was reorganized and a new constitution and by-laws were adopted in 1904. By that time, A. M. A. was a confederation of constituent state associations. Now, the State Association became a confederation of county medical societies. No doctor could become a member of the State Association except through membership in a chartered county society. Dr. Robert Wilson, Dean of the Medical College of the State of South Carolina, was elected president that year. The new by-laws provided for medical districts in the state, and Dr. Wilson appointed Dr. J. Wilkinson Jervey, of Greenville to be councilor for the Fourth District. In 1905, Dr. Jervey was elected to serve a further term of three years.

The annual meeting of the State Association in 1905 was held in Greenville. Dr. Davis Furman, who had been very active in the Greenville Society, was elected president, succeeding Dr. Robert Wilson. A momentous step was taken at this meeting. It was decided to publish a medical journal. Dr. Robert Wilson was elected the first editor of *The Journal of the South Carolina Medical Association*. This was in April, and the first number was published in June. The editor referred to the state meeting as the "high water mark of attendance." The delegates from Greenville County were Dr. W. C. Black and Dr. G. T. Swansdale. The society had 35 members. Fifteen doctors living within the county had not yet joined the society.

Dr. W. C. Black and Dr. Curran B. Earle were Greenville's two surgeons. Each discussed a paper at the meeting. Dr. Black discussed Dr. F. L. Pott's paper, "Six cases of Abdominal (sic) Obstruction," and Dr. Earle discussed a paper on "Appendicitis" by Dr. LeGrand Guerry.

A current list of constituent societies was published in *The Journal* at monthly intervals in 1905. The Greenville Society was not listed until November, 1905, seven months after Dr. Furman's election to the presidency of the State Association, and 14 years after the so-

ciety had been originally chartered. It is probable that the change in constitution and by-laws in 1904 required application for a new charter.

Be that as it may, the society as an organization is only about 67 years old. It is much younger than several other county societies. It was late "aborning," but it has been healthy and vigorous since its birth. It has not only been an active society in its own right, but its members have been very active in the State Association. It has furnished ten presidents to the Association, two of whom are still living. There are now 185 active members and 14 honorary members of the society. Seven honorary members are still in active practice.

The doctors who were active and prominent in the first quarter of the twentieth century, that is up to the end of World War I, and some of the events of interest will be mentioned.

We can go back to Dr. H. R. Rutledge. He was born in Charleston. He spent most of his active professional life in Greenville. He was a great grandson of John Rutledge, the first governor of South Carolina and the first chief justice of the United States Supreme Court. He, along with Dr. L. G. Corbett and Dr. J. Adams Hayne, organized the Southern Oaks Sanatorium for the treatment of alcoholics in 1906. A noteworthy characteristic of his was his erect posture which he maintained until his death in 1915. That same year both Dr. John W. Maxwell, Greenville's oldest physician from the standpoint of length of service, and Dr. W. S. Miller died.

Dr. Thomas T. Earle was a member of a large family which included physicians both before and after him. He was born in 1845 and lived until 1921. Earlier members of the Earle family were Dr. Robinson M. Earle, who was killed in 1838 by William Lowndes Yancey, the great secessionist and confederate political leader, who had come from Georgia to study law in Greenville; and Dr. Michael Baylis Earle (1814-1867), who was considered the leading physician in Greenville in his day.

Dr. Earle enlisted for service in the forces of the confederacy when he was fifteen years

of age. After the war, he studied medicine at George Washington University, graduating in 1869. In 1900, he was president of the South Carolina Medical Association.

He and his son, Curran, and a cousin, Dr. Joseph Earle, established and operated the first Greenville hospital to occupy a building designed and built for it. The hospital could accommodate 18 patients. It was closed in 1911, when the City Hospital was opened.

This astute, courtly physician of the old school died in 1921.

Greenville was chartered as a city under its present charter in 1868-1869. A prominent doctor, Dr. William R. Jones, was largely instrumental in bringing about the change from town to city. He served as the first mayor under the revised charter.

In 1901, his son, Dr. Clinton C. Jones, followed in his father's footsteps and was elected mayor of Greenville without opposition. He was re-elected twice.

Dr. Clinton Jones attended Furman University, and he received his medical degree from Bellevue Medical School.

He early became a leader in the civic, religious, and political life of the city. He was behind every movement for civic progress. It has been said, "His popularity and success as a physician gave him a wide range of loyal and enthusiastic friends" who in turn became ardent political supporters. In addition to his medical practice and his political activities, Dr. Jones was a large real estate operator.

Dr. William Edgar Wright (1859-1932) was graduated from the Medical College in Charleston in 1880. He had already read medicine under Dr. E. F. S. Rowley, who had been mayor of Greenville in 1885-87 and again in 1889-91. Before studying medicine, Dr. Wright attended Furman University. His friendly and likable personality is attested to by the fact that he was elected president of his class in medical school.

He, too, was interested in city politics, and he served at one time as a member of city council.

Dr. Wright lived to be seventy-three years of age, and he continued his practice until shortly before his death. In spite of a brusqueness of manner, he was greatly be-

loved by a loyal clientele. There was a tradition out in the textile villages of the city that he had never lost a case of pneumonia—and he never did if onion poultices had the power to save life.

Dr. T. W. Bailey practiced in Greenville from 1886 until his death in 1924. He was always a gentleman of the old school, with lots of reserve and dignity, which seemed to increase with age.

He got his medical degree from the College of Physicians and Surgeons in Baltimore. This school later merged with the University of Maryland.

Dr. Bailey was always interested in problems of public health. At one time, he was chairman of the Board of Health of Greenville. He also served a term as president of the Greenville County Medical Society.

There follow some gleanings from the *Greenville News*, as the events were recorded from day to day and which have some historical significance. They were lifted more or less bodily from that interesting book, *The Greenville Story*, By Mr. Frank Barnes. They are used with his permission.

In 1903, Dr. C. C. Jones, well known family physician of the city, was elected mayor. Sometimes that same year, Dr. J. R. Wilkinson, father of Dr. George R., left Greenville to become a medical missionary in China.

In 1905, Dr. J. Wilkinson Jervey, Councilor of the Fourth Medical District, organized the District Medical Association. This continued as an active organization, with well attended annual meetings, until it was absorbed by the Piedmont Post-Graduate Assembly in 1936.

Also in 1905, the Greenville County Medical Society flexed its muscles and expelled certain members because they persisted in accepting fees of \$3.00 for life insurance examinations after the society had declared \$5.00 to be the standard fee.

Greenville now had a private hospital in operation, and there was already agitation for the establishment of a city-owned hospital.

In September, 1906, Dr. Jervey published a paper in *The Journal* on "A Case of Complete Double Congenital Capsular Cataract." Dr. Carpenter had earlier in the year read a paper before the County Society on "The



Modern Mastoid Operation." Later in the year Dr. Carpenter published a paper on "Headaches, Cause and Cure." Interestingly enough, Dr. C. B. Earle, one of the two leading surgeons in Greenville in 1906, read a paper on a "Case of Contracted Pelvis Relieved (italics mine) by Cesarean Section." Rivalries were running strong in Greenville in the second decade of the century, and in addition to the illwill, animosities, and enmity which they engendered, they did stimulate scientific and literary effort.

Dr. L. O. Mauldin of Pickens returned from studies in London, Paris, and Berlin in 1906. He moved to Greenville and applied for membership in the Greenville County Society. He, too, limited his practice to diseases of the eye, ear, nose and throat. He soon published a paper on "Diagnosis of Obstructive Deafness and Classification of Each."

In 1906 Drs. L. G. Corbett, J. Adams Hayne, later South Carolina's eminent State Health Officer, and J. R. Rutledge, who had come to Greenville from Charleston, organized a stock company with a paid in capital of \$15,000 to own and operate the Southern Oaks Sanatorium for the treatment of alcoholics. The venture did not prosper, and the Corbett house in which the Sanatorium was located was sold in 1911 to the women's group which was working to establish a hospital in the city. This Corbett building housed the original City Hospital. It is still in use, forming at it does the southwest wing of the present Greenville General Hospital.

In 1907, the county society reverted to a practice which had been in vogue in Charleston in the early days of the Medical Society of South Carolina. In that year, the Greenville society advertised a fee list in the *Greenville News*. Day calls were set at \$2.00 and night calls at \$3.00. Office calls were \$1.00. These established fees continued with little variation until about 1920.

In 1909, Dr. W. L. (Buck) Pressly, who was to be A. M. A.'s first General Practitioner of the Year in 1948, played baseball with the Greenville Spinners in the Old South Atlantic League.

In 1910, Dr. C. C. Geer, retired medical officer of the U. S. Army, returned to Green-

ville and became manager of the Caesar's Head Hotel. Later he helped organize the Southeastern Life Insurance Company. This was Greenville's first life insurance company. After a successful operation lasting, perhaps, twenty years, it was absorbed by the Liberty Life Insurance Company, which also had been organized in Greenville. Dr. Geer was medical director of the Southeastern for many years.

In 1910, the newspapers of the country played up the widespread discussion within the medical profession of the possible dangers of the use of tobacco. Sometimes history does repeat itself!

Greenville was now actively planning a city hospital.

The Chick Spring Hotel reopened in May, 1910 with 50 rooms and 30 baths. The hotel first built in 1825, had been destroyed three times by fire. The hotel had been sold at auction to satisfy creditors a short time before it burned the last time.

It was announced on June 4, 1910 that the Salvation Army had acquired five acres of land within the city on which to erect a building to be used for the care of homeless children. This home was finally opened and was continued in operation for many years.

At a later date the Salvation Army operated a home for unmarried mothers. Dr. William Burnett was obstetrician for this home for many years. Until after the General Hospital was well established, all deliveries were done in the home.

In the fall of 1910, there was the announcement that the Charity Aid Society had made some enlargement of hospital facilities. This announcement was followed some days later by one to the effect that the Hospital Association was still working toward a good, big hospital, financed by the city and backed by city council.

In 1911, Dr. J. W. Jervy and Dr. Fletcher Jordan bought the Ottaray Hotel annex. They planned to convert it into a hospital. Later, however, they bought a building on North Main Street and gave up the idea of operating a hospital in the Ottaray annex. These two congenial colleagues maintained their offices in their recently purchased building for sev-

eral years. The building became known as the Jervey-Jordan building. Unfortunately, these good friends had a "falling out," which persisted. Dr. Jordan bought Dr. Jervey's interest in the building, and Dr. Jervey moved out. He built a new building on Church Street, in which he operated an eye, ear, nose, and throat hospital until his death in 1945. His son Dr. Jack Jervey (J. W. Jervey, Jr.) had specialized in diseases of the eye, ear, nose and throat. He practiced with his father. After the father's death, Jack closed the hospital but continued to maintain his offices in the building until early in 1958, when the building was demolished to allow right of way for the Church Street thoroughway.

In 1911, Dr. J. W. Jervey was elected president of the South Carolina Medical Association.

The City Hospital opened to receive patients in January, 1912. Among substantial contributors to this project who were named in the newspapers were Dr. Curran B. Earle and Dr. E. W. Carpenter. Colored citizens gave a sum of money and one hundred pieces of linen. The hospital admitted 46 patients during its first month of operation.

The hospital at this time was not owned by the city. It had been acquired and was operated by a group of interested citizens with Mr. W. G. Sirrine acting as president.

In 1912, Dr. Hext M. Perry died. He was the son of former governor and eminent statesman and unionist, Ben F. Perry.

In 1913, Dr. George T. Tyler, a well trained surgeon, a Johns Hopkins Medical School graduate and a retired Army Medical officer, located in Greenville and opened a private surgical hospital. Already hospital beds in Greenville were in short supply. Dr. Tyler was an eccentric and a marked individualist and he would not have been happy working

in a hospital which he did not control. Dr. Fletcher Jordan who had, perhaps, the largest family practice in the city, threw his support to Dr. Tyler, and he became a busy surgeon almost overnight.

In 1915, Greenville lost three of its pioneer physicians. Dr. H. R. Rutledge, Dr. W. S. Miller, and Dr. John W. Maxwell, Greenville's oldest physician from the point of service.

In 1916, there was an editorial in the *Greenville News* which discussed the need for an enlargement of the City Hospital. The need was urgent. The agitation started a movement which resulted in a new wing, opened in 1920. Matters did not run smoothly during the four intervening years. Difficulties arose between the Board of Governors and the medical staff. The entire staff resigned in November, 1916. There followed a long newspaper argument and ultimate reconciliation.

World War I was at hand. Some American doctors had already been working with the British Army. One of these was Dr. James E. Daniel of Greenville. When America entered the war, these American doctors transferred to the American Army. Dr. Daniel returned to Greenville and organized an ambulance company. With Dr. Daniel in command, the company sailed for duty in France in the summer of 1917.

For Greenville medicine an old era was over, and a new one was in prospect. The profession was to be less provincial and more cosmopolitan and more sophisticated because of experiences and advances during the war and the coming of several younger men after the war. The trend toward specialization was accelerating, and the character of hospital practice was beginning to change from emergent and desperate cases to more elective situations.



## REPORT ON CHILD HEALTH SERVICES IN SOUTH CAROLINA SINCE THE SURVEY IN 1946

J. I. WARING, M. D.  
Charleston, South Carolina

In 1948 the South Carolina Chapter of the American Academy of Pediatrics published a survey of Child Health Services in South Carolina as a part of a national survey conducted in all the states. Since that time many changes and improvements have taken place, and this report is made now to take stock of what progress has been made since the earlier survey was made.

In 1948 many suggestions of a rather general nature were made, and much of the increase in desired facilities may be the result of general progress in health matters rather than the outgrowth of the recommendations of the survey itself.

Figures used for comparison will correspond only roughly to the confines of the period covered, and comparisons may not be accurate, but will approximate sufficiently the changes which have occurred over the past ten or twelve years. The general outline of the earlier survey will be followed in this reappraisal.

In the period considered, there has been a considerable increase in the child population (under 15 years), and a greater relative increase in the number of physicians, hospital beds, and other necessary elements which go to make an improvement in child care.

In 1948 the child population was 713,356

In 1958 the child population was 797,719

In 1948 there were 1079 active practicing physicians

In 1958 there were estimated to be 1650 active practicing physicians

There are now 68 pediatricians compared with 26 in 1948, and 75 obstetricians compared with a much smaller number in 1948.

There has been a moderate shift of population from the so-called isolated semi-rural and isolated rural areas to the lesser metropolitan and adjacent areas.

The per capita income of the people of the state has increased from \$779 to \$1180, which figure must be taken with a grain of salt be-

cause of the devaluation of the dollar.

The infant death rate has dropped from 41.4% (33.8% white, 51.0% Negro) to 31.6% (22% white, 44% Negro) in the past ten years.

In the preparation and training of physicians there has been a great improvement. The improvement in facilities at the Medical College of South Carolina for teaching of pediatrics has been marked. There was one full time teacher in 1948, and now there are four full time and ten part time teachers. The three residencies of 1948 have increased to six, and the student body has risen from 42 to 80 members. A very active Well Baby Clinic established at the Medical College now offers excellent instruction (previously lacking) in the routine care of young children, and provides good training for the student who is to do general practice. The development in the Medical College Hospital and other hospitals of the many specialties necessary for proper pediatric consultation has been a major improvement.

The Nursing services of the State Board of Health have been improved by the addition of new personnel, despite the many demands for nursing abilities in fields outside of public health. The 168 nurses of 1948 are now represented by 218 members of the nursing staff.

In recent years there has been a great increase in the number of Practical Nurses, who can fill many of the gaps left by the scarcity of graduates. While they do not yet enter into public health activities, they give valuable substance to the picture of child care in general. South Carolina licensed 1515 of these nurses in 1957.

Hospital services improved immensely over the 10 year period. The bed capacity in 1947 was 4166. In 1957 it was 5397 plus 1547 "non-acceptable" beds and 1177 bassinets. Hospital construction has been active and better pediatric facilities have been added.

In the same period Health Centers increased



from 8 to 32, and auxiliary units from 5 to 65. The number of Well Child Conferences decreased from 1222 to 1056, but attendance (visits) increased from 16,779 to 21,088. Many more pediatricians became available to hold these conferences. New patients increased from 7052 to 9499.

Mental Health Clinics have grown from two to five in number. A decade ago only 198 patients were seen. Now about 800 (under 18 years) pass through the clinics. The need is still great for more facilities.

We have no figures to show that there has been any great improvement in the quantity or quality of school health services, though there has been a great increase in interest in school health with both the medical and lay people. The South Carolina Medical Association has established a committee which is working actively on the subject. In educational circles there has been activity in respect to special classes, so that there are now provisions for 11 classes (including 180 children) for the physically handicapped, 125 classes for the educable mentally defective children (including 1868 children), 3 classes for trainable mentally defective children (including 30 children). There are now 15 local speech centers in the schools in addition to the 4 Speech Schools conducted by The Junior League.

There has been an increased concern for the retarded child. Five newly formed chapters of the Association for Retarded Children are working actively. Whitten Village, essentially a custodial institution for white children, and Adults has increased its child population from 228 to 522 (still with a long waiting list). The first provision for retarded Negro children is of recent origin. Pineland, in Columbia, provides 300 beds for severely retarded Negro children.

There has been established recently with state and federal funds, a Child Development Clinic at the Medical College, where with a complete staff evaluation of the status of the retarded child can be made on as scientific a basis as such matters permit.

Services by the State Board of Health to crippled children through state clinics have been much expanded. There are now being held 488 clinic sessions annually, with an at-

tendance of 9596 (clinic visits). These clinics furnished 530 patients for surgery to hospitals where they spent 10,791 days. Two special completely staffed clinics for patients with left lip or cleft palate are held at regular intervals. Three clinics (previously two) for rheumatic fever patients have been in operation for several years. Patients suffering from seizures are now handled through the regular Crippled Children's Clinics and the Seizure Clinic at the Medical College.

One of the recent improvements in the Crippled Children's Clinics has been the addition of a pediatrician to each of the orthopedic clinics, so that the evaluation of the children is far more complete than it was formerly.

In addition to these official activities, there has been recently much contribution in this field from the voluntary agencies such as the National Foundation, The Crippled Children Society, United Cerebral Palsy, The Muscular Dystrophy Association and others. The Heart Association cares for 124 children in its 6 clinics. The Cancer Society looks after 93 children in its 11 clinics (where professional services are rendered free by physicians).

Physical therapy is now available in 16 hospitals or centers as compared with 4 in 1948. The Medical College now has a Department of Physical Medicine and Rehabilitation. The Orthopedic Camps conducted by the State continue to operate successfully.

The dental situation in South Carolina in general is still deplorable. Dentists are scarce and there is no local source of training for them. Legislation has been passed for establishing a dental school, but the necessary funds are not forthcoming. The State Board of Health employs 5 dentists, 5 hygienists, and deals largely in application of fluoride, and in prophylaxis and in fillings. It gave services to 9021 children, not a great deal many more than the 8363 seen in 1946. It made 16,500 examinations, gave 10,853 prophylactic treatments, did 5487 fillings, and applied fluoride 38,261 times.

Dentists of the state have increased from 384 to 485. Interest in fluoridation has been variable. Fourteen communities now add fluoride to their water supplies, but some of the larger communities are still skeptical.

Special organizations such as The South Carolina Citizens Committee on Children and Youth, and The South Carolina Health Councils continue to foster interest and activity in a very worthwhile fashion.

Over the period since the last survey there has been a considerable improvement in child health and the necessary facilities for its promotion. While the needs outlined in the Survey of 1946 have not been met by any means, the trend toward betterment has been pronounced and the promise for the future is great.

#### *Recommendations*

It is rather difficult to make specific recommendations for improvement of the situations in which we seem to be deficient. Obviously bettering of educational, economic, and general public health situations would do a great deal toward making an impression on such things as the infant death rate. South Carolina has some rural areas which are poorly supplied with physicians, and many in which there are no pediatricians or obstetricians. The scarcity of dentists has been noted, and particularly in the less well to do classes is there a crying need for some way of securing dental attention. There are very few, if any, dentists in the state who work particularly with children, and the medical practitioner sometimes finds it hard to get a dentist who is willing to deal with these patients. Specialization or semi-specialization in the field of children would be very desirable from the standpoint of the care which would be received.

It is to be noted that the Negro death rate is about twice that of the white. Improvement here must certainly be sought through the economic, educational, and public health channels, perhaps even the moral channel, as the problem of illegitimacy no doubt has some effect on the death rate, especially the infant death rate.

Expansion of public health activities appears to hinge to some extent on the ability to secure personnel. It is our understanding that there is a scarcity in the various fields of nursing, of health officers, and of other people concerned in the usual public health activities. The occasional outbreak of diphtheria in the state, and the delinquency in making use of poliomyelitis vaccination would appear to in-

dicate that much more effort might be expended on preventing these ills.

While progress has been made in the way of an increase in the number of children seen in Mental Health Clinics and by psychiatrists, the field is far from being covered, and expansion along that line would certainly be in order. However, it is not likely that official mental health clinics would ever be able to take care of all the problems because of the elaborateness and duration of observation. The development of a Center for estimation of the status of mentally retarded children has been a valuable bit of progress, but here again because of the long, extensive and expensive handling of these cases, of necessity very few children can be seen. If some simpler and briefer method could be developed for taking care of the children in this category, it would help a great deal in classification and estimation of future progress of a larger number of children. More clinics would help, but that means much more money. As it is, most of the children referred to such a source are already known to be mentally retarded, and it is rather the exceptional one who is offered anything more specific than what might have been given by an interested practitioner, especially a pediatrician.

If in his educational experience the medical student could be impressed with the need of interest in this class of children, and also impressed with the fact that he can and should handle the less serious emotional problems, he could do a great deal in his practice to clarify and perhaps cure some of these difficulties. Already an effort is being made in this direction, but it probably could be expanded and emphasized to a greater extent in order to achieve or develop much interest in these matters.

Developments in school health activities are not entirely clear or uniform. Some parts of South Carolina are still not too far distant from the time when school health activities consisted largely of rapid inspection of numerous school children by a political appointee or a superannuated practitioner. Fortunately this seems to be on the way out, and the efforts which have been made by the State Joint Health and Education Committee, the Maternal and Child Health Division of the State

Board of Health, and the School Health Committee of the South Carolina Medical Association to work with the people in educational fields is certainly worth continuation and expansion. A number of local School Health Committees have been organized. There would appear to be some need for the meeting of minds here, as sometimes the physician and the teacher do not see eye to eye as to the extent and goal of school health work. More joint planning would be a simple approach.

As in many other states, there is now a multiplicity of volunteer organizations interested in the field of health. There would appear to be a need for some correlation of the various organizations in order to prevent duplication and even of competition. As an example, the United Cerebral Palsy organization has had some difficulties with The Crippled Children Society, or at least has failed to make a proper approach or to reach any reasonable agreement with it. The National Foundation, having changed its coat, and being faced apparently with the fact that funds are not being collected in as large amounts as they were before, has had to contract its field as far as poliomyelitis is concerned and is making some effort to enter into the new fields which it has now included. The various smaller organizations add a certain amount of confusion to the picture, and it would be most desirable if they could all get together with such established agencies as the

State Board of Health or the Committee on Children and Youth and work out something more consistent and effective.

There are a number of items which might be considered in an effort for improvement. For instance, it might be possible to furnish physical therapy to crippled children at home when difficulties of travel are serious for the child. It would be worthwhile for some interested organization to set up a more intensive campaign in the matter of fluoridation, which still is not accepted in a number of areas of the state (chiefly on the basis, apparently, that no one should be obliged to drink fluorides if he does not want to, rather than with the feeling that fluorides do any good or harm). It is simple to say that better medical services in the rural areas should be provided, but the economic solution is not clear. There are still many midwives practicing in the state, and in fact delivering a very considerable percentage of babies, almost entirely Negro babies, and replacement of their services by those of skilled in obstetrics would certainly be desirable, but in the absence of the doctors the midwives continue to serve a most useful purpose. It is not likely that specialists will be enticed into areas which are economically poor and which present many difficulties of distances, proper hospital facilities, and the like.

Ten years have seen many improvements. There are many more steps to go.





# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Traumatic Heart Disease

DALE GROOM, M. D.  
Department of Medicine

*Case Record*—The 44 year old driver of an automobile involved in a collision sustained fractures of the second, third, fourth and fifth ribs of the left anterior chest wall, presumably inflicted by impact of her precordium against the car steering wheel. An electrocardiogram made in the emergency room immediately thereafter showed atrial fibrillation with no other abnormalities.

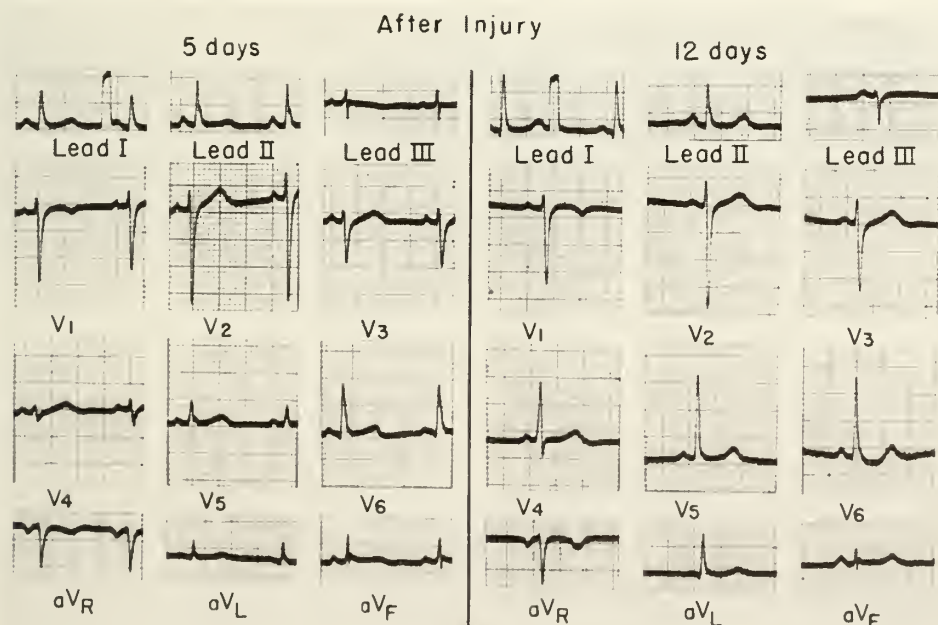
On the following day the patient's cardiac rhythm was said to be regular but she continued to complain of pain in the chest. Cardiac evaluation five days after the accident disclosed only an area of ecchymosis over the site of the precordial fractures, a moderate drop in blood pressure on deep inspiration, and the unusual ECG picture on the left. There were no murmurs, no pericardial friction rub, no pneumothorax, subcutaneous emphysema or shift of the mediastinum. The heart borders were observed fluoroscopically to have normal excursion without evidence of peri-

cardial fluid. Her circulatory status remained satisfactory throughout.

*Electrocardiogram*—The tracing made five days after injury is remarkable for the greatly reduced voltage of the QRS complexes in most precordial leads. Compared with the ECG of the twelfth day (right) which is normal, the QRS amplitude is lower in almost all leads, and this occurs without a proportionate decrease in amplitude of the P or T wave deflections.

In both electrocardiograms the rhythm is a regular sinus one and in the latter the Q-T interval is slightly longer, commensurate with the drop in rate from 88 to 70 per minute. Also during the intervening week the electrical axis is shifted somewhat toward a more horizontal position.

*Discussion*—This case illustrates two manifestations of traumatic heart disease: first, the transient arrhythmia (atrial fibrillation) which occurred immediately after the injury, and second, the localized impairment of electrical activity of the ventricular myocardium appearing five days later with return to a normal electrocardiogram by the twelfth day. That the blow which was of sufficient severity to cause multiple fractures of the overlying bony structures also caused injury to the heart there can be little doubt, particularly in a woman of her age with no history nor evidence of pre-existing heart disease.



Proof of the type and extent of structural damage to the heart is lacking. However one might assume from a comparison of these two electrocardiograms that a contusion of the anterior wall of the left ventricle, perhaps producing a hematoma or injury confined mainly to the subepicardial layers, caused the gross diminution of the R waves in precordial leads recorded over that area. It is the QRS complexes which are selectively altered; the fact that the P waves are not comparably reduced in amplitude ( $V_4$ ,  $V_5$ ) proves that the abnormality is not due simply to a decrease in electrical conductivity of the traumatized tissues of the chest wall. There are no ST segment elevations indicative of a generalized process such as hemopericardium and, curiously, the T waves do not undergo the evolutionary changes commonly seen in other types of myocardial disease or in pericarditis. Alterations in the T waves which do occur between the fifth and twelfth days are minimal and might be ascribed to the shift in electrical axis, to change in position of the patient, or perhaps to abdominal distention. Actually the limb leads alone show no real abnormality. The significant change takes place in the anteriorly directed potentials, those of depolarization of the anterior ventricular wall.

Injuries to the heart resulting from penetrating wounds of the thorax are usually more obvious than those from nonpenetrating wounds and are recognized as causes of hemorrhage into the pericardial space, tamponade, shock, arrhythmias, conduction ab-

normalities, etc. Occasionally a coronary artery is damaged sufficiently to produce myocardial infarction, with the electrocardiographic signs one would expect. The important consideration in traumatic heart disease is that the same consequences to the heart or great vessels may result from injuries which do not cause fracture or visible damage to the chest wall. For example, rupture of valve leaflets, of chorda tendineae, or of the heart wall itself has been found at autopsy following blows to the chest such as the steering wheel trauma of this patient. An interesting observation stemming from aircraft and other accidents imposing an abrupt footward deceleration of the body along its long axis is a characteristic rent in the ascending aorta ascribed to the sudden downward force of the heart which is suspended vertically much like an apple on its stem.

Certainly with the mounting toll of accidents, traumatic heart disease should be looked for more frequently than it is—especially in non-penetrating injuries to the thorax. Usually the ECG provides the most sensitive indications in the form of ST segment displacements or T wave changes of a non-specific nature. Such tracings should be interpreted with due care not to misconstrue as evidence of cardiac injury abnormalities arising from shifts in axis or position of the heart or from the effects of electrolyte imbalance, emotional stress or other extracardiac factors on the electrocardiogram.

## THE NEEDLE IN THE PHYSICIAN'S OFFICE

FRANK L. GEIGER, M. D.  
Columbia, S. C.

A 26 gauge, half an inch needle can be one of the most important tools in the physician's office. However, this is true only if used in conjunction with a tuberculin syringe containing the selected dilution of tuberculin.

It has been said that tuberculosis is a social problem with a medical aspect. Nevertheless, all diagnostic and therapeutic work must be done by physicians. Among the 200,000 physicians in the United States approximately 90,000 are in general practice. There are 1534 physicians in this State and about 1000 are general practitioners.

All physicians, and especially those in general practice, pediatrics and internal medicine must be in the front line. Indeed, they must assume the leadership if the goal of tuberculosis eradication in South Carolina is to be achieved. There is no short-cut to the eradication goal. Every person who is now infected (estimated 500,000 persons in the State with positive tuberculins) must be examined periodically as long as he or she lives.

Since the tuberculosis case rate continues to de-

cline in this State, it is increasingly important to learn more about the reservoir of infection—who are infected and where the infected live. The tuberculin test is the tool of choice to answer these questions for it does screen out those who have been infected with tubercle bacilli.

A tuberculin test must be accurately administered, read in 72 hours, and recorded by exact mm. of induration (10 mm. or more of induration is considered a positive reaction), zero to 4 mm. of induration is considered a negative test and 5-9 mm. of induration is read as doubtful. Doubtful tests should be repeated in three months.

It is well to remember that a positive tuberculin skin test may vary in intensity and temporarily may decrease or disappear in the course of high fever, exanthematous disease, miliary tuberculosis and the last stages of pulmonary tuberculosis. The skin reaction is frequently abolished or reduced in intensity during ACTH or cortisone administration. Following cessation, the skin reaction returns to its previous level within a short time.

Although no direct or proportional relationship exists between the level of hypersensitivity and the extent and severity of tuberculous disease, the intensity of reaction to tuberculin is not without practical significance. As a general rule an induration of 20 mm. or more is found in cases of recently acquired infection, in caseous, non-pulmonary tuberculosis (e.g. in lymph nodes and bones), and in persons in continuous contact with active tuberculosis cases who show no signs themselves of active or progressive disease. Fluctuating levels of sensitivity to tuberculin are seen in serous membrane tuberculosis, which apparently correspond to varying exudation and re-

sorption of fluid. In advanced tuberculosis the sensitivity is usually low.

Doctor, your help in the eradication of tuberculosis in South Carolina is respectfully requested and solicited. Won't you (if you are not already so doing) give the tuberculin test routinely to your patients. Have x-ray films of the positive reactors and follow the positive reactors systematically whose films are initially negative.

For your convenience, old tuberculin in dilutions of 1-10,000 or 1-1000 is available upon request to the Section of Tuberculosis Control, South Carolina State Board of Health, Columbia, South Carolina.

---

**PRACTICAL LEADS TO PUZZLING DIAGNOSIS: NEUROSES THAT RUN THROUGH FAMILIES.** By Walter C. Alvarez, M. D., D. Sc. Cloth. \$9.00 Pp. 490. J. B. Lippincott Company, Philadelphia, 1959.

A book about 673 patients, relatives, of phychotics, alcoholics and epileptics. They presented themselves with vague or severe complaints for which no organic cause was apparent, although many had had previous operations for the same symptoms. These are the patients who go from physician to physician, to surgeon and to the operating room without receiving any lasting benefits.

It should be read by the surgeon who is determined to find an organic basis for every symptom, and the lay person would find it interesting reading. He would be able to identify some of his friends, and understand them better.

The general practitioner will recognize the patient who returns regularly week after week and the internist some of his problem cases.

Dr. Alvarez becomes too enthusiastic at times, and the physician who swallows this work whole will miss much organic disease. Even "relatives" inevitably will develop organic distase and finally die.

The book is well written and interesting reading, but one should not become bewitched by the ideas.

Harold Pettit, M. D.

---

**AN ATLAS OF NORMAL RADIOGRAPHIC ANATOMY** by Isidore Meschan, M. A., M. D. W. B. Saunders Co., Philadelphia, 1959. Price \$16.00.

This already well known Atlas of Normal Radiographic Anatomy has gained an enviable position on the release of its second edition. The text has been generally enlarged to include material not contained in the first edition and in certain instances completely re-written to present concepts in areas which have undergone dynamic change in the past eight years. Of importance is the addition of a chapter on radiation protection "in view of the increasing necessity for consideration of this facet by anyone who would utilize x-radiation for any purpose." Technique-wise, the book is up-to-date containing adequate descriptions of the newest procedures for investigating the individual body systems. The format has been changed in this revised editon and the change is decidedly pleasing. Many new illustrations have been added to clarify the text. For those interested in having a single reference book covering radiographic positioning and radiographic anatomy presented in a well organized and easy to read style, I heartily recommend this volume.

William K. Schwerzler, R. T.





## ORAL IRON PREPARATIONS

Some 250 products containing iron are listed in pharmaceutical directories, and hardly a month goes by without the announcement of new ones. Their great number and variety, and the frequent claim that this or that preparation is better absorbed, or less irritating to the gastrointestinal tract than others, add a good deal of confusion to what is essentially a simple situation. The effectiveness of an iron preparation is determined solely by the amount of elemental iron absorbed, and except in terms of the amount absorbed, effectiveness has nothing to do with the original chemical form. Once absorbed, the iron is combined with a specific protein to produce transferrin and the original form of the iron in no way affects the utilization of transferrin.

In relation to the iron contained in the preparation, there is normally no appreciable difference in the amount of iron absorbed from the commonly used iron compounds such as ferrous sulfate, ferrous gluconate, ferrous carbonate and ferric ammonium citrate. Since ferric iron must be reduced to the ferrous form before absorption, however, and gastrointestinal conditions may, in a few patients, interfere with reduction, a ferrous salt should be selected.

*Special Forms*—Although chelated iron compounds have been heavily promoted, not enough work has been done to establish whether there is better or poorer absorption than with ferrous sulfate. Nor is there convincing evidence that copper, molybdenum, liver extract, or any of the B vitamins enhance the absorption of iron in iron-deficient patients. Experimental studies indicate that ascorbic acid may enhance the absorption of iron somewhat, but at best the effect is too slight to justify the inclusion of this vitamin in iron preparations. Cobalt salts have also been promoted as adjuncts to iron, but proof is lacking that they increase either absorption or utilization of iron. Long-term administration of cobaltous chloride has occasionally had goitrogenic and thyroid-depressing effects in children (R. J. Gross, et al., *Pediatrics*, 15:284, 1955).

Whatever the preparation used, within limits, the amount of iron absorbed increases with the amount administered; and the amount administered is limited by the gastric irritation caused by the iron. It has never been demonstrated convincingly that gastric irritation is influenced by anything except the amount of ionic iron present after it has been split off from the molecule containing it. The claim that certain preparations are less irritating than others is usually valid only to the extent that they contain smaller amounts of ionizable iron. Equivalent doses of a simple ferrous salt would be tolerated just as well.

*Iron content and cost*—The difference in iron content of different preparations is not always appreciated. That is why ferrous gluconate is sometimes thought to be less irritating than ferrous sulfate. Comparison of the amounts of iron in equal doses shows why ferrous gluconate is "less irritating":

<i>Form</i>	<i>Iron per gram</i>
Exsiccated ferrous sulfate ( $\text{FeSO}_4 \cdot \text{H}_2\text{O}$ )	330 mg.
Ferrous sulfate ( $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ )	200 mg.
Ferrous gluconate	115 mg.

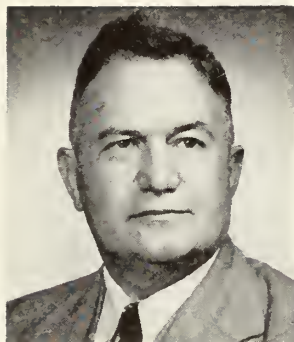
Although iron salts are better absorbed when they are taken between meals, they may be taken with or immediately after meals to minimize gastrointestinal irritation and diarrhea. For the same reason it is desirable to start iron therapy with small doses and to increase the dose gradually. There is no evidence that gastric acidity (or giving hydrochloric acid to patients with low gastric acidity) significantly affects the absorption of ferrous iron.

In general, special forms of iron or mixtures of iron with accessory factors are relatively expensive in terms of iron content, as shown by the following table:

Iron preparations should be kept where they will be out of the reach of small children. Accidental ingestion of large amounts of iron can produce serious and even fatal toxicity (N. J. Smith, *J. of Pediatrics*, 53:37, 1958).

From *The Medical Letter*, July 24, 1959

<i>Preparation</i>	<i>Content</i>	<i>Iron per tablet</i>	<i>Approximate cost per tablet</i>	<i>Approximate cost/100 mg. iron</i>
Exs. Ferrous Sulfate USP	195 mg. exs. ferrous sulfate	65 mg.	1¢	1.5¢
Feosol Tablets (SKF)	195 mg. exs. ferrous sulfate	65 mg.	1.5¢	2.3¢
Feosol Spansules (SKF)	150 mg. exs. ferrous sulfate	50 mg.	9¢	18¢
Fergon (Winthrop)	325 mg. ferrous gluconate	40 mg.	1.5¢	3.8¢
Chel-Iron (Kinney)	330 mg. iron choline citrate	40 mg.	3¢	7.5¢
Mol-Iron (White)	195 mg. ferrous sulfate (plus molybdenum oxide)	40 mg.	1.5¢	3.8¢
Roncovite (Lloyd)	200 mg. exs. ferrous sulfate (plus cobalt chloride)	67 mg.	4.5¢	6.8¢



## PRESIDENT'S PAGE

### MEDICAL EDUCATION

Is it necessary to change our standard of Medical Education as we have experienced them for the past fifty years? The answer is yes, without hesitation or equivocation. The reasons are quite simply expressed as *competition*.

There is little doubt but what the example the men in medicine have set has been noble and one that youth strives and yearns to follow—now this is not 100% by any means, but by and large the citizens respect the Doctor and the work he has done, and is doing. There are always nonconformists in every profession and avocation, but thank goodness they are few among the medical ranks, especially in South Carolina.

Why must there be a change in our preparatory program? Well, it now requires eight years . . . i. e., four years in academic work and four years in medicine—one or the other must give. Which shall it be? I prefer to think it should be the academic work. I certainly would not want to hear of the first two years of medicine becoming any more difficult than they are now.

Educators through a fifty thousand dollar grant from the Rockefeller Foundation studied the question for Boston University over a two year period, and made a recommendation for a six year program for medical education . . . "the new plan described as a program of general education with medicine as a major."

There would be two years in the School of Liberal Arts and no course would be repeated that was received in High School, which would also apply to medicine, and elective studies would be emphasized.

A "tutorial system" would be instituted with each student having a monitor for the liberal arts and another for the medical sciences.

When certain students withdraw, then their places would be filled by the conventional four year medical student.

During the medical part of the curriculum, two-thirds of the class will take medical subjects and one-third electives during each third of the year. During each one-third of the final year one-third of the students will take electives, one-third a clinical clerkship in medicine and surgery and one-third will participate in the school's ecology program—one month each of pediatrics, psychiatry, obstetrics and home care.

Summer sessions will be used primarily to teach the humanities and non-medical sciences until the sixth year, when the student may also elect courses in medicine or research. Large blocks of time will be left open each year for a variety of electives, including courses in religion, ethics, music, literature and history.

Small-group instruction will be stressed, rather than large, formal lectures.

An integral part of the plan is a residence in which all students, male, female, married and single, can live preferably among some members of the faculty. Intermingling among the various age levels including social and sports programs, is expected to expedite the student's adjustment.

The reason for this change is as stated—competition. Medicine is losing men of fine caliber to other professions because of the long road and many years in preparation through internship, residences, military service, etc. We must and will make a change until we find it unwise and unprofitable, not financially, but service-wise for the benefit of humanity.

William Weston, Jr.

# Editorials

## SYSTEMIC USE OF VASOCONSTRICTORS IN RESPIRATORY INFECTION

The ephedrine type of vasoconstrictor has well established value in bringing about temporary relief of nasal congestion. Direct application to the nasal mucosa of weak solutions of chemical variants such as phenylephrine (Neo-synephrine) are generally free from complications so long as they are used discreetly. Their excessive use and their combination with numerous other drugs has led to highly undesired disturbances of the normal functions of this sensitive, ciliated mucosa.<sup>1</sup> Another approach to the problem has been offered by the recent introduction of several new preparations in which vasoconstrictor or pressor drugs are taken orally. This appears to be symptomatically effective and certainly moves the problem of side-effects from the nasal mucosa to such areas as the cardio-vascular system. For the normal individual, moderate systemic doses of these agents should present little hazard and this can be based on experience with the extensive public use of the same group of drugs as "pep pills" and "reducing tablets". Some concern can be indicated, however, for the hypertensive in border-line cardiac failure. There is a therapeutic incompatibility introduced when these agents are combined with anti-histaminics, most of which have a distinct atropine-like action. Atropine actively paralyses the vagal control of cardiac rate and this, by virtue of pressor-receptor reflexes, is the most important protective mechanism preventing tachycardia in the presence of abnormally elevated arterial pressure. The individual in precarious cardiac balance might be well advised to ration these oral treatments for nasal congestion.

1. Editorial. J.A.M.A. 169: 956, 1959.

—R. P. Walton, M. D.

## FLUO RIDES AGAIN

According to *The State*, "the town of

Winnsboro, with approximately 5,000 water customers, recently became the 16th public water supply in South Carolina to add fluoride to the water to fight tooth decay. Shaw Air Force Base, also adds the fluoride.

The battle to add the fluoride to Columbia's water supply seems to have gotten some sort of postponement in the face of two other big public programs: annexation and tax reassessment. But with water supplies of 1,903 American cities and towns having sufficient natural fluoride, Science Service in Washington notes that one out of every three people in the country using central water supplies now drinks fluoridated water."

Over in Lancaster the story is reversed. After having employed fluoridation for the city water supply for some time, the City Council decided to abandon the practice. Why this step was taken is not clear from newspaper accounts. One local physician was strongly opposed to fluoridation (as was one local chiropractor) while others supported with vigor a return to earlier practice. City Council seemed unimpressed by an imposing array of evidence from the best medical sources. Could there be politics involved?

## CORRESPONDENCES

July 24, 1959

Dear Dr. Waring:

The Medical and Chirurgical Faculty of the State of Maryland (Maryland State Medical Association) has, for many years, expressed concern over the inroads the Veterans Administration Hospitals are making into the realm of the private practice of medicine. In order to combat the fantastic growth of treatment of non-service connected ailments of veterans, the Faculty has passed many resolutions condemning this practice and urging that something concrete be done to curtail or stop this insidious growth.

The Faculty's House of Delegates at its 1959 Annual Meeting passed a resolution that all component medical societies of the American Medical Association be contacted and urged to support the Faculty's stand in this respect.

As a result of a letter sent to every A.M.A. com-



ponent medical society, eleven answers have been received all in the affirmative.

It is anticipated that other societies will also reply in the affirmative and that full support to this projected concerted action will be forthcoming from them as well.

I sincerely hope that you will see fit to publish this letter and alert your readers to the steps that are being contemplated along these lines, not the least of which is the hope that an appropriate resolution will be introduced in the A.M.A.'s House of Delegates at its clinical session in Dallas in December.

Sincerely,

Amos R. Koontz, M. D., Chairman  
Committee on Veterans' Medical Care

A letter from a politically oriented relative in Virginia:

August 10, 1959

" . . . They are going to try to ram a bill through this next session of the General Assembly making it compulsory to have polio shots. From the information we have been able to gather so far, nobody is sure just how many shots are a guarantee of immunity, or even if it won't be necessary to have one every year. Furthermore, nobody has yet proven that polio is contagious. So far, I would be dead against such legislation, which sounds to me like more socialized medicine. And more infringement on individual liberties. But I would like to hear from you, how you feel on the subject, and if you have any information that we could use in debate. We really need it, as this is going to be a real fight. . . ."

Dear—

I'm afraid I'm not much help on the polio question, as I seem to be on the other side. As with most medical questions, nothing is absolute about the polio vaccine, but everything points to its efficacy. The safety factor is in the clear; the completeness of immunity is not utterly assured in every case, but then neither is it with any other inoculation, human responses being what they are.

Polio is probably not contagious in the usual sense, but certainly it is communicable. The virus can be found in the intestinal tract of patients, and probably spreads very much as does the typhoid germ. The appearance of epidemics points definitely to the spread under conditions favorable to the virus.

The question of compulsion seems to me to be rather academic-political. I know many people feel that they should retain the privilege of achieving ill health or suffering death rather than be forced to do something which, because of their lack of knowledge, seems unnecessary to them. I'm afraid I am not very democratic in such matters, if democratic privilege means leaving to the judgement of "the people" a decision in things about which they know very little, especially when reliable expert guidance is available. If we are to abandon legal compulsion for the good of the population, we would have to give up small-

pox and diphtheria vaccination, pasteurization, chlorination, fluoridization, and the common practices of sanitation, as well as necessary quarantine and a great many tried and proven measures which have had an enormously beneficial effect on public health.

North Carolina has passed a compulsory polio vaccination law, and I think it is a sound step, especially since the public has been so utterly apathetic about utilizing a measure which has been shown to be safe and efficacious by and large. Since polio vaccination is a young procedure, there are naturally some uncertainties about the necessary number of doses and the duration of protection, but in a little while larger experience should allow more accurate statements.

Obviously, I suppose, if Virginia makes immunization compulsory, she must furnish without cost to the indigent (who are generally the most delinquent in such matters) the means of obtaining the vaccine. Even so, the cost is cheap to anybody in a population which takes spending for luxuries as a first consideration. Advice and admonition to the public have not been effective. Perhaps it is time for healthy compulsion.

This is not "Socialized Medicine" and I do not think that any doctor but a bigoted doctor would consider it so. As you probably know, the American Medical Association, which fights socialized medicine with tooth and toenail (and rightly so) puts the business of furthering polio immunization among its chief objectives. Therefore, as a member of that and other medical bodies, I would suggest that by now you are completely converted to a change of heart and realize that you have an opportunity to help the cause of public health. . . .

Yours — Etc.

---

## NEWS

---

### AIKEN COUNTY NEWS

Recently Dr. R. L. Worrell joined Dr. Brodie in the general practice of medicine at Wagner, S. C. Dr. Worrell is a graduate of the Medical College of South Carolina and recently completed his internship at the Columbia Hospital at Columbia, S. C. He is a native of South Carolina.

Dr. Gerald Burroughs who was formerly in practice at Jackson, S. C. has left to enter a residency in psychiatry at the Medical College of Georgia in Augusta, Ga. His practice has been taken over by Dr. R. N. DeVore and his wife, Dr. Margaret DeVore. Both Drs. DeVore are natives of South Carolina, and are graduates of the Medical College in Charleston. Prior to coming to Jackson they had been in private practice in Oceana, West Virginia.

---

### TWO TO HOSPITAL STAFF

Dr. Lloyd B. Kingsbery and Dr. Jarl B. Nordman have been appointed as orthopedic surgeons at the

Veterans Hospital in Columbia the management announced recently.

Dr. Kingsbery, native of Georgia, received his MD degree from the USC School of Medicine, Los Angeles, Calif. in 1939. Before joining the VA, he was the head of the Orthopedic Department, La Lima Hospital on the north coast of Honduras for five years. He engaged in private practice for approximately six years in Fort Worth and Waco, Tex., and Los Angeles. Just prior to his appointment, Dr. Kingsley was employed by the Kaiser Foundation, Oakland, Calif.

Dr. Nordman is a native of Finland. His MD is from the University of Helsinki Faculty of Medicine, Helsinki, Finland, in 1939.

Dr. Nordman was engaged in private practice for three years in Kuopio, Finland, and Verbeig, Sweden. Prior to his appointment at this hospital, he was engaged in private practice in Ohio.

---

#### DRS. SMITH, SHEALY TO OPEN OFFICES IN EASLEY

Dr. and Mrs. George F. Smith, recently from Blytheville, Ark., arrived in Easley in August. Dr. Smith has just completed two years service with the Air Force and at the time of his discharge held the rank of Captain.

Dr. Smith and Dr. Gibson Shealy of Bamberg plan to begin their medical practice as soon as the new office building which they will occupy on Alfred Road, near the Easley Baptist Hospital, is completed.

A graduate of Easley High School and Wofford College, Dr. Smith received his medical degree from the Medical College of South Carolina, and served his internship at General Hospital, Greenville.

Dr. Shealy is a graduate of Presbyterian College, Clinton, and the Medical College of South Carolina. He also interned at General Hospital, Greenville, and was also associated with Dr. Smith while with the Air Force at Blytheville, Ark.

---

Dr. Robert Lee Sawyer, M. D. opened offices at Saluda July 1 in the office formerly occupied by Dr. Robert J. Outlaw.

Dr. Sawyer, a native of Johnston, graduated from the University of South Carolina and the Medical College of South Carolina.

While at the Medical College he was president of the senior class and student body.

---

The town of Salley joined hands with the town of Wagener August 26 in paying homage to Dr. J. H. Brodie, beloved physician who has served this section of the state for forty-three years. The affair was held in the Wagener High School cafeteria, which is a large building and considered adequate for the immense crowd expected. However, everybody couldn't get in at one time. They kept coming and Dr. Brodie, who admits to being seventy-two, looks twenty years younger and showed no fatigue after shaking the many hundreds of hands and receiving countless hugs

of affection from those whom he has helped in their hours of sickness and pain through the years. He stood tall and tanned, with touches of silver in his dark hair, and a look of surprise in his keen eyes, as the multitude descended and surrounded him with their affection. It must have been a wonderful moment for him, realizing that so many people loved him and came out to be sure that he knew it.

Also being honored on this happy occasion was Dr. Robert Worrell, the new doctor who was being welcomed to Wagener and who has set up office in the new medical building being erected near Dr. Brodie's office. He is being received enthusiastically and cannot doubt the warmth of his welcome, not only from Wagener folks but throughout the large area he will serve. His coming will give Dr. Brodie a bit more time to go hunting and fishing and ease the heavy load of responsibility he has carried for so long. But Dr. Brodie will never be able to retire. Cars will go right on lining up in front of his office, and he will continue to listen to what hurts folks, to give shots, tie up wounds, and bandage cut knees.

Dr. Brodie is not only a physician, he is an institution, a way of life, a shoulder to lean on. He has always faced life with courage and death with sympathetic understanding and his tender hands have lifted and soothed and healed.

In my opinion, the greatest man in the world is THE COUNTRY DOCTOR, who takes care of all of you and doesn't specialize on just certain parts. Who gives all of his life to easing pain and patching folks up so they can live long useful lives. I say with all sincerity that to the vast multitude of people who know Dr. Brodie and call him "our doctor", he is THE GREATEST COUNTRY DOCTOR IN THE WORLD.

*Aiken Standard and Review*

---

The recent appointments of Dr. John H. Rickenbacker and Dr. John T. Daves were announced today by the management of the Veterans Hospital in Columbia. Dr. Rickenbacker is a 1954 graduate of the U. N. C. School of Medicine. His post graduate training and experience includes a one-year rotating internship at City Memorial Hospital, Winston Salem, N. C.; one-year residency training at Charlotte Memorial Hospital, Charlotte, N. C. in pathology and, prior to his appointment at the Veterans Hospital, he was completing a three-year residency in general surgery at Charlotte Memorial Hospital. Dr. Rickenbacker served in the Armed Forces from 1952 to 1956. He is married and will live in Columbia. Dr. John T. Daves received his M. D. degree from the University of Maryland, Baltimore, Md. in 1917. He completed a two-year internship in surgery at the University of Maryland Hospital and St. Joseph's Hospital in Baltimore. Dr. Daves served approximately two years in France with the U. S. Army Medical Corps during World War I and also served as a medical examiner for Selective Service in 1941. He has been in the practice of medicine for approximately 40 years. He

was a staff member at the Florida State Hospital at Chattahoochee for three years and has been in private practice in Danville, Va. and Brunswick, Ga. He is a member of the state medical societies of Virginia and Georgia, the Southern Medical Association, and the AMA.

### OUR LOCAL DOCTORS

From time to time we point out the criticisms of men in the *medical field* just as we do those of members of other professions.

Not so many years ago, one of the country's leading family doctors criticized the trend toward specialization and expressed the belief that what this country needed was more old-time family doctors who took the time to know their patients, their families, and who understood their emotional problems, as well as their physical ones.

We are glad to say that in Hartsville, we believe our doctors have not fallen in with the modern trend to an objectionable extent.

The charities and kindnesses performed by doctors in the local area should be pointed out in this connection.

Many a little child, or poor family which could not afford proper medical attention, has been treated free by local doctors. Little publicity is given these events, but many doctors in this area are performing such humanitarian services daily.

The Messenger wishes to point out that the doctors in any community can render services which are not second to those of any other group. It can even be said that the spirit prevailing in the medical fraternity in any community has a major influence on the entire life and future of that community.

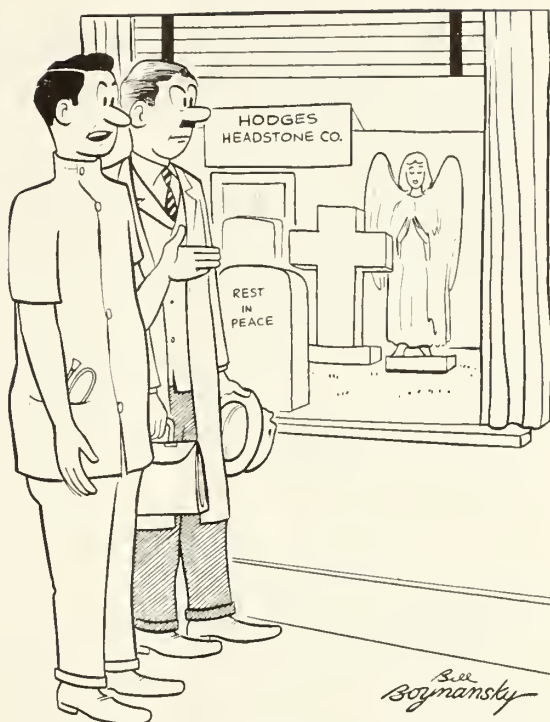
In Hartsville, we are blessed with above-average ability and many kind hearts in the medical profession, and this is one of our greatest blessings.

—*The Hartsville Messenger*

Dr. Sarah T. Morrow, Chester County Health Officer for the past six years, has been awarded a U. S. Public Health Service Traineeship for advanced study at the School of Public Health University of North Carolina, Chapel Hill. Dr. Morrow is on leave of absence, starting September 15, and expects to return to Chester upon completion of her training, September 1, 1960.

Six practicing physicians in the Chester area have agreed to serve for one month each as director of the Health Center to leave the office open for Dr. Morrow's return. The six physicians will act as clinical directors in supervisory capacities until March.

Dr. Morrow, a Charlotte native received a B. S. degree in medicine from the University of North Carolina and was graduated with the medical doctor's degree from the University of Maryland in 1944. Following a rotating internship at Charlotte Memorial Hospital, Dr. Morrow took advanced training in Pediatrics at Atlanta's Grady Hospital.



*"I tell you mayor this area should be rezoned, it's lowering the morale of my patients."*

Her husband, Dr. T. Lacy Morrow, and their six children, have moved to Chapel Hill, where they will reside during Dr. Sarah Morrow's traineeship.

Dr. and Mrs. Edwin R. Young of Due West will leave for missions work in Pakistan, representing the Associate Reformed Presbyterian Church. Their entire support will come from Young Memorial ARP Church, Anderson.

Dr. James W. Hellams, a native of Cray Court, has opened offices in Fountain Inn for the general practice of medicine.

Dr. Hellams graduated from Gray Court-Owings High School and attended Wofford College, Howard College, and was graduated from the Medical College at Charleston.

He served as a captain in the U. S. Air Force for two years at Okinawa and in New Mexico.

The opening of his office took place September 1.

Dr. G. A. Hennies, Chester County physician for some 25 years, has resigned, effective Oct. 1, to retire to his home at Junaluska, N. C.

His resignation was given to the Chester County Board of Commissioners two weeks ago. He has practiced 49 years.

Cecil C. Ram, M. D. has announced the opening of his office for the practice of Urology at No. 4 Ram Building, 138 Laurens Street, N. W., Aiken, S. C.



#### DR. YOUNG HAS JOINED DR. PROPST

Dr. William F. Young has announced his association with Dr. Charles Propst in the general practice of pediatrics. He will work with Dr. Propst at his office, 21 E. Calhoun St., Sumter.

A native of Florence, Dr. Young attended Florence High School and the University of North Carolina, receiving an AB degree at the latter. He attended the medical school at the University of Pennsylvania in Philadelphia and interned at Pennsylvania Hospital there. After spending two years stationed in Texas with the Air Force, Dr. Young returned to Philadelphia and spent the last two years specializing in pediatrics at Children's Hospital and completing his residency.

---

## DEATHS

---

#### DR. J. J. GRAHAM

Dr. James J. Graham died at his residence in Marion after a lingering illness.

Dr. Graham was a well-known Negro physician who served Mullins and Marion County 41 years.

He recently was chosen as doctor of the year by his associates in recognition of his services.

---

#### DR. WALTER H. WATSON

Dr. Walter H. Watson, 43, died August 15 after a brief illness.

A native of Batesburg, he was educated in schools of Charleston, Porter Military Academy, Furman University and Medical College of S. C.

Dr. Watson interned at St. Francis Hospital in Greenville and was in the Medical Corps during World War II. He returned to Greenville in 1946 and practiced medicine until his death.

---

#### DR. JOSEPH WARREN WHITE

Dr. Joseph Warren White, nationally known orthopedic surgeon suffered a heart attack and died recently while swimming off Waikiki.

A Staff Member of all major Honolulu hospitals, Dr. White retired in April, 1957, as chief surgeon of the Shriners' Hospital for Crippled Children after 33 years service at Shriners' hospitals in Honolulu and in Greenville, S. C.

Born March 2, 1892 in Boston, Mass. to Dr. and Mrs. Herbert Warren White, he was a graduate of Roxbury Latin School, Mass., and the Harvard School of Medicine, receiving his doctor's degree in 1917 after interning at Quiriqua Hospital, Guatemala.

He joined the Navy as an assistant surgeon in 1917 and served at sea for two years. He then studied orthopedic surgery and became head of Chelsea Naval Hospital orthopedic service until 1923, when he resigned from the Navy.

He entered private practice for a year, joined the Massachusetts General Hospital staff, then from 1924 to 1927 was chief surgeon of the Shriners' Hospital for Crippled Children in Honolulu.

In the years since, Dr. White headed the Shriners' Hospital in Greenville and was technical advisor for crippled children to the South Carolina State Board of Health until 1946. He was with the Oliver General Hospital in Augusta, Ga., until 1949.

Until recent years he was at Tripler Army Hospital, Hale Mohalu in Pearl City, Kuakini Hospital, the Queens Hospital and others.

In earlier years he also instructed in orthopedic surgery at Harvard, Duke University.

He was a member and past president of the American and Western orthopedic associations, and past officer of Pan Pacific Surgical Assn., American Academy Orthopedic Surgeons, and member of La Societe Internationale de Chirurgia Orthopedique, Hawaii Medical Association, and the Orthopedic Forum American Assn.

---

## ANNOUNCEMENTS

---

### PAPERS REQUESTED FOR SCIENTIFIC PROGRAM FOR STATE MEETING

Dr. William H. Prioleau  
August 12, 1959

The Scientific Program for the annual meeting of the South Carolina Medical Association, May 18-19, 1960 is now being prepared. The present plan is to have five panel discussions. A number of prominent out of state speakers are being invited to be on the panels. The out of state speakers are also being invited to give papers on a subject of their choice. According to the present plan, there will be sufficient time for several short papers by members of the South Carolina Medical Association. Offerings are invited. It is requested that an abstract of the proposed paper be sent to the—

Committee on Scientific Program  
Dr. William H. Prioleau, Chairman  
158 Rutledge Avenue  
Charleston, South Carolina

Duke University Regional Center for the Study  
of Aging  
Durham, N. C.

### FIRST ANNUAL CONFERENCE ON GERONTOLOGY

November 19, 20, 21, 1959

The first Conference will emphasize basic biological and medical aspects of the problems of aging. The second Conference will emphasize social and economic aspects of aging problems.

The proceedings of the Conferences, including the major papers and formal discussions will be published.

All sessions will be held at Page Auditorium, West Campus, Duke University.

---

**UNC SCHOOL OF MEDICINE  
THIRD ANNUAL SYMPOSIUM  
NOVEMBER 24-25 — CHAPEL HILL**

Postgraduate Course in Diabetes Mellitus  
and Problems in Kidney and Electrolyte Disturbances  
Small Group Teaching and Panels as well as Lectures  
Staffed by the Division of Metabolism, with  
Dr. Max Miller, Western Reserve School of Medicine,  
as Guest Participant.

A block of tickets to the Carolina-Duke game on November 26 has been reserved until September 1 for those attending. Send checks (\$4.50 plus 25c for mailing) to UNC Athletic Ticket Office, Box 109, Chapel Hill, mentioning the Symposium. Accommodations will be limited.

---

**MEDICAL COLLEGE OF GEORGIA  
and  
MEDICAL COLLEGE OF GEORGIA  
FOUNDATION, Inc.  
Present  
Their Full Post-Graduate Courses  
FRACTURES IN GENERAL PRACTICE  
December 1, 2, 3, 1959**

---

**AMA COUNCIL ON NATIONAL DEFENSE  
ANNOUNCES  
MEDICAL CIVIL DEFENSE CONFERENCE  
NOVEMBER 7-8, 1959, CHICAGO, ILLINOIS**  
The Council on National Defense, American Medical Association, is sponsoring the tenth annual conference of the County Medical Societies Civil Defense Organization. The conference will be held at the Morrison Hotel, Chicago, Illinois on November 7-8, 1959.

*The Program*

These yearly conferences are planned to inform and otherwise assist medical and health personnel for their respective roles in disasters. Conferees have the opportunity (1) to participate in workshop sessions concerning medical preparedness to cope with disasters, (2) to discuss and exchange information dealing with emergency medical services, (3) to be informed on the availability of pamphlets and articles devoted to the medical and health aspects of civil defense, and (4) to hear outstanding speakers report on appropriate civil defense and disaster topics.

**THE AMERICAN FRACTURE ASSOCIATION  
20TH ANNUAL, MEETING, 1959**

November 1, 2, 3, 4

**ACCEPTABLE FOR CATEGORY NO. 2**

American Academy of General Practice  
Louisiana Academy of General Practice

The Twentieth Annual Meeting of the AMERICAN FRACTURE ASSOCIATION will be held in New Orleans, Louisiana . . . Hotel Roosevelt . . . November 1, 1959, through November 4, 1959, with an optional trip the morning of November 5th to the Leprosarium at Carville, Louisiana.

**SECURE RESERVATIONS DIRECTLY FROM  
THE ROOSEVELT HOTEL IMMEDIATELY FOR  
ARRIVAL ON OCTOBER 31st, inasmuch as the  
meeting starts at 9:00 a. m., November 1, 1959.**

Registration facilities will be available beginning the afternoon of October 31, 1959. The entire session will be held within the Roosevelt Hotel.

---

**AMA TO MEET AT DALLAS  
IN DECEMBER**

The scene of the American Medical Association's 13th annual clinical session Dec. 1-4 will be Dallas, Texas, called "Big D" by its residents.

Founded in 1841, metropolitan Dallas now has a population of more than a million persons, with some 680,000 living in the city itself.

Geographically situated at the center of the mid-continent oil fields, Dallas is headquarters for more than 1,000 firms in the oil production and allied industries.

Aircraft production, insurance, finance and banking, electronics, and regional wholesale distribution are the city's other leading industries. It is the home of more insurance companies than any other city in the nation.

Dallas is rapidly becoming a leading convention center, ranking ninth among convention cities in 1958. Its new Memorial Auditorium provides 110,000 square feet of exhibit space in addition to its other facilities for meetings. Dallas has over 200 hotels and motels with some 16,000 rooms.

Visitors find Dallas a fashion capital, with its wide variety of fine stores that satisfy every taste and pocketbook. The city has also made its mark in the field of women's wear manufacturing.

Dallas is the home of Southern Methodist University, known throughout the country for its law and engineering courses, theological studies, school of business administration, and pre-medical courses.

The Southwestern Medical College of the University of Texas, Baylor Dental School, University of Dallas and Dallas Theological Seminary are also there. It has gained fame as a medical center and now has 29 hospitals. The Dallas County Medical Society has more than 1,100 members and the Dallas County Dental Society more than 400.

The park systems of Dallas, Highland Park and University Park include more than 100 different parks, with more than 6,500 acres. They are enjoyable throughout the year because of the Texas climate. Outdoor activities are just as pleasant in mid-February as in August. There is only occasional snow. Dallas is one of the few cities in the Southwest having a zoo in which most of the animals are displayed in native surroundings.

Dallas has a wide variety of entertainment, with some 70 theaters and many nightclubs and restaurants. There are Mexican, Swedish, Italian, German, Greek and Chinese restaurants.

---

The November Scientific Meeting of the Columbia Medical Society will be held at the Hotel Columbia, Monday, November 9, 1959. The social hour will begin at 7:00 P. M., dinner at 7:45, and the scientific session will begin at 8:30 P. M.

The guest speaker for this occasion will be Dr. William M. Roberts, Gastonia, North Carolina, who will speak on the subject "Slipped Upper Femoral Epiphysis". The local speaker will be Dr. Austin T. Moore, whose subject will be "Self-Locking Vitallium Hip Prosthesis".

All interested physicians are cordially invited to attend.

---

#### FIRST NATIONAL CONFERENCE ON MEDICAL ASPECTS OF SPORTS INJURIES TO BE HELD IN DALLAS

The first national Conference on the Medical Aspects of Sports, sponsored by the American Medical Association will be held Nov. 30 in Dallas, Texas.

The one-day meeting is for college and high school athletic directors, coaches, trainers, and doctors. "These are the individuals who are charged with responsibility for the health of athletes," said Dr. Allan J. Ryan, Meriden, Conn., chairman of the A.M.A. Committee on the Medical Aspects of Sports.

Highlights of the program will be panel discussions of on-field responsibilities of the team physician and prevention of head injuries in athletics. Other discussions will concern amphetamines and the attitudes of athletes; a medical program for high school football; exercise and the oxygen debt; the biodynamic potential of the American male; exercise and the kidney, and the pathology of trauma.

---

#### NEW CLINICAL STUDY ON MALIGNANT CARCINOID

The cooperation of physicians in nearby areas is requested in a study of the carcinoid syndrome (malignant carcinoid) recently initiated in the Clinical Center, National Institutes of Health, Bethesda, Md. This study is being conducted by the National Cancer

Institute and has as its primary purpose a search for therapeutic agents that may favorably affect the course of the disease. The biochemical abnormalities responsible for the physiologic manifestations mentioned below constitute a highly sensitive parameter of disease activity. In addition, they serve as a potential metabolic target.

Recent publications have defined in detail this clinical syndrome. It consists of a slowly progressive malignant disorder which affects middle-aged or elderly persons. Episodic diarrhea, breathlessness, and flushing of the skin occur. The physical findings include redness and telangiectasia of the skin, cardiac murmurs primarily affecting the pulmonic and tricuspid valves and hepatomegaly. Frequently, right lower quadrant surgical exploration has been performed in the past for removal of a local carcinoid tumor. In spite of extensive study, there is, at the present time, no form of therapy which alters the progressively downhill course of patients with the carcinoid syndrome.

It is preferred that patients be referred prior to the advanced bedridden stage of their illness. Accepted patients will be studied for varying periods of time and may be followed subsequently either by the referring physician or physicians at the Clinical Center. A comprehensive and individualized program will be instituted for each patient and will include appropriate supportive and symptomatic care as well as the above-mentioned experimental therapy.

Physicians interested in the possibility of referring such patients should write or telephone:

Dr. Charles G. Zubrod  
Clinical Director  
National Cancer Institute  
Bethesda 14, Maryland  
(OLiver 6-4000, Ext. 4346)

or

Dr. Emil Frei, III  
Head, Chemotherapy Service  
National Cancer Institute  
Bethesda 14, Maryland  
(OLiver 6-4000, Ext. 2500)

Clinical Center, NIH  
August 1, 1959

#### FOR SALE

GE upright fluoroscope. Little use—good condition. Contact: Christie Pediatric Group—13 Medical Court, Greenville, S. C.



**MEDICAL COLLEGE  
FOUNDERS' DAY SYMPOSIUM AND SEMINAR  
WEDNESDAY — NOVEMBER 4, 1959**

- 8:30- 9:15— Registration and Greetings  
Simon Baruch Memorial Auditorium
- 9:30-10:30— DEMONSTRATION IN DEVELOPMENTAL DIAGNOSIS IN CHILDREN  
Dr. Gilbert Young, Assistant Professor of Pediatrics
- 10:30 — INFECTIONS OF THE URINARY TRACT IN EARLY CHILDHOOD  
Dr. Mitchell I. Rubin, Professor and Head of Department of Pediatrics, University of Buffalo  
School of Medicine and Physician-in-Chief of The Childrens Hospital, Buffalo, New York
- 11:30 — DEMONSTRATION AND DISCUSSION: CASES OF RENAL INFECTION  
Dr. Mitchell I. Rubin and Dr. John R. Paul, Jr., Professor and Head of Department of Pediatrics
- Afternoon Session: GLIMPSES OF RESEARCH  
Group participation in discussion and observation of research activities in laboratories of the Medical College
- 2:30- 4:00— a. APPLICATION OF THE STRAIN-GAUGE IN STUDYING EFFECTS OF DRUGS ON THE HEART  
Dr. Robert P. Walton, Professor of Pharmacology (Department of Pharmacology)
- b. ISOTOPES IN DIAGNOSIS  
Dr. Maria G. Buse, Instructor in Chemistry (Radiotope Laboratory)
- c. AMPLIFICATION OF HEART SOUNDS  
Dr. Dale Groom, Assistant Professor of Medicine (Heart Sound Laboratory)
- d. SLUDGE BLOOD  
Dr. Melvin H. Knisely, Professor of Anatomy (Department of Anatomy)
- e. FLUORESCENT TECHNIQUES IN IDENTIFICATION OF CANCER CELLS  
Dr. Harold R. Pratt-Thomas, Professor of Pathology (Department of Pathology)
- 4:30- 6:00— 1. THE ARTIFICIAL KIDNEY  
Dr. Arthur V. Williams, Assistant Professor of Medicine (Saul Alexander Renal Research Center)
2. THE BALLISTOCARDIOGRAPH  
Dr. Peter C. Gazes, Assistant Professor of Medicine and Pharmacology (Department of Pharmacology)
3. THE CLEFT PALATE  
Dr. Robert F. Hagerty, Assistant Professor of Plastic Surgery (Cancer Clinic)
4. ATHEROSCLEROSIS AND FAT METABOLISM  
Dr. Edwin Boyle, Associate in Medicine (Lipid Metabolism Laboratory)
5. CARDIAC BY-PASS PUMP  
Dr. Wendell B. Thrower, Assistant Professor of Surgery (Surgical Research Laboratory)

**FOUNDERS' DAY  
THURSDAY — NOVEMBER 5, 1959**

- 8:15- 9:30— CANCER CONFERENCE: CASE PRESENTATIONS  
Dr. John C. Hawk, Associate Professor of Surgery (Hospital Amphitheater)
- 9:30-10:00— GREETINGS—Simon Baruch Memorial Auditorium
- 10:00 — SURGICAL TREATMENT IN STERILITY AND INFERTILITY  
Dr. Edward J. Dennis, III, Assistant Professor of Obstetrics and Gynecology
- 10:30 — OUTPATIENT GYNECOLOGIC DIAGNOSIS  
Dr. John C. Weed, Clinical Associate Professor of Obstetrics and Gynecology, Tulane School of Medicine
- 11:30 — EVALUATION OF LABORATORY METHODS IN THE DIAGNOSIS AND TREATMENT OF LEUKEMIA  
Dr. Albert C. Cannon, Assistant Professor of Clinical Pathology
- 1:00 — Alumni Luncheon—Alumni Memorial House
- 2:30 — CONCEPTS OF PSYCHOSOMATIC MEDICINE  
Dr. Joseph Hughes, Professor of Psychiatry, Woman's Medical College of Pennsylvania
- 3:30 — SOME FUNCTIONAL CARDIAC STATES  
Dr. John A. Boone, Professor of Medicine
- 4:15 — SURGICAL CARDIOVASCULAR THERAPY  
Dr. Wendell B. Thrower, Assistant Professor of Surgery
- 7:00 — Alumni Reception—Francis Marion Hotel
- 8:00 — FOUNDERS' DAY BANQUET—Francis Marion Hotel  
"A Doctor in Our Town"—Auxiliary to the Greenville Medical Society  
Address—Dr. Leland S. McKittrick, Clinical Professor of Surgery, Harvard Medical School  
Chairman, Council on Medical Education and Hospitals, American Medical Association

**FRIDAY, NOVEMBER 6, 1959**

- 9:00 — SOME ASPECTS OF CHRONIC PYELONEPHRITIS  
Dr. Cheves M. Smythe, Assistant Professor of Medicine
- 10:00 — IS BLOOD PRESSURE REDUCTION IN PATIENTS WITH HYPERTENSION A SIGNIFICANT ACHEVEMENT?  
Dr. John H. Moyer, Professor of Medicine and Chairman of the Department of Internal Medicine, Hahnemann Medical College
- 11:00 — CUSHING'S SYNDROME: CASE PRESENTATIONS  
Dr. John F. Buse, Assistant Professor of Medicine
- 12:00 — ROUND UP CONFERENCE

**SOUTHEASTERN REGIONAL MEETING  
OF AMERICAN COLLEGE OF PHYSICIANS,  
TO BE HELD IN COLUMBIA, OCTOBER 30 AND 31.**

A cordial invitation is extended to all interested in internal medicine. No registration fee.

**Friday, October 30, 1959**

- 9:00—Long-Term Follow-Up of Patients Treated with Amphotericin B.  
James C. Crutcher, M. D., Chief, Medical Service, Veterans Administration Hospital, Atlanta
- 9:20—Tumors of the Small Bowel with Illustrative Case.  
Charles R. Holmes, M. D. (Associate), Columbia
- 9:40—Homologous Serum Hepatitis Occurring in Laennec's Cirrhosis.  
Julius Wenger, M. D. (Associate), Medical Service, Veterans Administration Hospital, and Emory University School of Medicine, Atlanta.
- 10:00—Management of Delirium Tremens with Preliminary Observation Using Trifluoperazine.  
N. B. Baroody, Jr., M. D. (by invitation) and W. G. Baroody, M. D. (Associate), Florence.
- 10:20—The Atypical Atrial Septal Defect.  
Leonard S. Sommer, M. D. (Associate), Asst. Professor of Medicine, University of Miami School of Medicine.
- 10:40—Coffee Break
- 11:00—The Clinical Significance of High Amylase Values.  
J. H. Hilsman, M. D., Atlanta.
- 11:20—The Hereditary Tendency and Clinical Significance of Polycystic Renal Disease.  
Nicholas A. Tierney, M. D. (F.A.C.P.), Miami Beach.
- 11:40—Percutaneous Retrograde Cerebral Sinography.  
Louis L. Battey, M. D. and George W. Smith, M. D., Depts. of Medicine and Neurosurgery, Medical College of Georgia.
- 12:00—Pulmonary Embolism and Thrombophlebitis—Illustrative Cases.  
Paul W. Boyles, M. D. and Franz H. Stewart, M. D. (F.A.C.P.), Miami.
- 12:20—Clinical and Experimental Evidence for Digitalis Induced Hyperkalemia.  
A. Calhoun Witham, M. D. (Associate), Associate Professor of Medicine, Medical College of Georgia.
- 12:40—Meeting Adjourned.

**Saturday, October 31, 1959**

- 9:00—Meningococcemia—A Cause of Prolonged Fever.  
Robert J. Hoagland, Colonel, MC., Chief, Dept. of Medicine, Martin Army Hospital, Fort Benning.
- 9:20—Multiple Myeloma: A prototype Protein Proliferative Disease with protean clinical and laboratory manifestations.  
M. W. Dexter, M. D., Ph.D. (Associate); A. H. Lawton, M. D., Ph. D., Sc. D.; R. L. Davis, Sc. D.; E. B. Stewart, M. A.; and M. B. Cole, M. D. (F.A.C.P.), Veterans Administration Center, Bay Pines, Florida.
- 9:40—Value of Kidney Biopsy in the Diagnosis of Renal Disease.  
C. M. Smythe, M. D. (by invitation) and A. V. Williams, M. D. (Associate), Assistant Professors of Medicine; Forde McIver, M. D. (by invitation), Assistant Professor of Pathology and Kenneth M. Lynch, Jr., M. D. (by invitation), Professor of Urology, Medical College of S. C.
- 10:00—Digitalis Sensitivity in Chronic Pulmonary Insufficiency.  
C. W. Silverblatt, M. D.; G. L. Baum, M. D. (F.A.C.P.) and M. M. Dick, M. D. (F.A.C.P.), Veterans Administration Hospital, Coral Gables.
- 10:20—Cardiac Massage in Acute Myocardial Infarction. Report of a Case and a Review of the Literature.  
Wm. M. Straight, M. D.; Robert Litwak, M. D. and John C. Turner, M. D., Miami.
- 10:40—Coffee Break.
- 11:00—The Choice of a Diuretic Agent, with Special Reference to the Heterocyclic Sulfonylamides.  
James A. Kemp, M. D., Instructor, Dept. of Medicine, Medical College of Georgia.
- 11:20—Internal Medical Aspects of Chorioretinitis with special reference to Toxoplasmosis.  
Hugh H. DuBose, M. D. (Associate), Columbia.
- 11:40—Agranulocytosis Associated with Acetazolamide (Diamox).  
F. G. Hoffman, M. D. (by invitation); S. L. Zimmerman, M. D. (F.A.C.P.) and J. D. Reese, M. D., Veterans Administration Hospital, Columbia.
- 12:00—Asymptomatic Pulmonary Alveolar Proteinosis.  
George V. Irons, Jr., Captain; William E. Furst, Captain; Bertrand M. Bell, Captain, USAF (MC) Medical Service, 1710th United States Air Force Hospital, Donaldson Air Force Base, S. C.
- 12:20—The Clinical Implications of Sclerosis of the Aorta and its Cephalic Branches.  
Ellison Richards Cook, III, M. D. (F.A.C.P.), Savannah.
- 12:40—Meeting Adjourned.



*Dr. Lull presents Award of Merit from the American Medical Education Foundation to Dr. William Weston, Jr., president of South Carolina Medical Association.*

#### **A PLAN OF ACTION TO LIMIT FEDERAL MEDICAL CARE OF VETERANS TO SERVICE-CONNECTED DISABILITIES**

The Association of American Physicians and Surgeons for many years has advocated that the Veterans Administration Act be revised to provide for government paid medical and hospital care of veterans to those with service-connected disabilities only.

The House of Delegates of the Medical and Chirurgical Faculty of the State of Maryland proposes a plan to achieve this objective. The plan is outlined in the following letter:

"The House of Delegates of the Medical and Chirurgical Faculty has endorsed the recommendations of its Committee on Veterans Medical Care and resolutions which were passed at the annual meeting of the House in 1957 and again in 1958. This year, 1959, the House again expressed its endorsement of the following recommendations:

- "1. Limit Federal medical care of all veterans to service-connected disabilities.
- "2. Have veterans with service-connected disabilities cared for by the Armed Forces Hospitals or by local civilian hospitals on a Hometown Care basis. U. S. Public Health Service hospitals might also be used to a limited extent.
- "3. If and when Number 1 and Number 2 are accomplished, a study be made from the State level as to the disposition of the Veterans Administration hospital facilities. Consideration should be given to turning them over to the States, possibly as hospitals for tuberculosis and neuro-psychiatric patients.

"These recommendations were forwarded to all State Medical Societies in 1958, as well as to the American Medical Association.

"At the 1959 meeting of the Medical and Chirurgical Faculty's House of Delegates, the House voted to send copies of these recommendations to all State Medical Societies again and to the American Medical Association, stating, 'that we are very anxious to get concerted action by all State Medical Societies so that we will have some chance of getting a Congressional Hearing before the House Veterans Affairs Committee.'

"In explanation of the above, it is pointed out that 85% or more of the cases cared for in Veterans Administration Hospitals are non-service-connected cases. Several national administrations have stated there is no more reason for a veteran getting free medical service than any other citizen, unless his disability is service connected. This medical care costs the taxpayers almost a billion dollars a year. This information is contained in the Committee report to the House of Delegates of the Medical and Chirurgical Faculty. "It is felt by the House of Delegates that if a concerted effort is made by all State Medical Societies and the American Medical Association a Congressional Hearing could be forced and thereby bring to the attention of the American taxpayer the present state of affairs. There is little hope of getting any action in this matter without the publicity attendant upon such a Congressional Hearing; such publicity would bring to the attention of the taxpayer the amount of money being spent for taking care of veterans with non-service-connected disabilities and would, it is felt, force some action on the part of Congress.

"Competent advice from our representatives in the Congress suggests that such a hearing could be obtained if the A.M.A., supported by all of the State Medical Societies, would ask for it. They also feel it would be futile for any one State Society to endeavor to obtain such a hearing.

"There is every reason to believe that Congress is rather economy-minded at the present time, more so than for years. They are concerned about inflation. Now is the time to act.

"It is the earnest hope of the Medical and Chirurgical Faculty of Maryland that your Society will take action similar to that taken by the Faculty's House of Delegates and will also urge the American Medical Association to join in trying to obtain the Congressional Hearing which is considered desirable and is the only means of correcting present abuses in Veterans Medical Care.

Sincerely yours,  
William Carl Ebeling, M. D., Secretary"

According to the Maryland Medical Society, accomplishment of the goal of limiting federal medical service of all veterans to service-connected disabilities would eliminate about 85% of the socialized care now



provided veterans and would save the taxpayers almost a billion dollars per year. Certainly, this is a worthy objective to be sought by every patriotic American.

We urge each AAPS member to present the Maryland plan to his county and state medical societies and recommend wholehearted supporting action. If all county, state and national medical groups will join in requesting a Congressional Hearing on the Veterans Administration Act, and ask for corrective action, we believe that success can be achieved.

The following is a reprint of an article, "Veterans and Patriotism," by AAPS Delegate, Amos R. Koontz, M. D.,<sup>\*</sup> which was printed originally in *Current Medical Digest*, April, 1959. It is a timely discussion dealing with the VA medical care problem and offers some recommendations which may be of assistance in appraising the issue and reaching satisfactory conclusions.

### VETERANS AND PATRIOTISM

by

Amos R. Koontz, M. D.

It is to be expected that there would be a higher degree of patriotism among the veterans of our wars than among our citizens. Is this correct? Let us look into the matter.

A little more than a year ago I was invited to make the principal address at the opening of a new hospital in a small town in Virginia. When the time came for the opening ceremonies, my invitation was rescinded. I was told by one of the local doctors that the invitation was withdrawn because the mayor of the town had heard that I had written or spoken (I am guilty of both) against veterans getting free medical care for non-service-connected disabilities. I don't know whether the service record of the mayor was distinguished or undistinguished. That is inconsequential. But, as chief executive of his town, what kind of an example of citizenship does he show if he favors having his fellow citizens pay his medical expenses simply because he once happened to wear the uniform? He may or may not have worn it proudly. Maybe he went into the service unwillingly. What would the great Virginian, George Washington, say of him? What would General Lee think of him? Fortunately he is not representative of the citizens of his great state.

Unfortunately, though, he is representative of a great many veterans throughout this nation. A great many have been led to believe that because they once wore the uniform, they are set apart as a special class of citizens who should be accorded special privileges. Do they not realize that in war time everyone cannot wear the uniform, and that the work of many of those out of uniform is often just as necessary for victory as that of those who serve with the colors?

It is understandable that a man of weak intelligence might be puffed up by the flattery of unscrupulous politicians seeking his vote, into thinking that he was something special. But how can a man of affairs, of

integrity, of a worthwhile place in the community come to think that because he happens to be a veteran (among millions of others), he needs some special kind of treatment or special favors from the rest of his citizens. Such an attitude is simply sordid, grasping, stupid rapacity.

Originally the law did not allow veterans with non-service-connected disabilities to have free medical care. In the 1920's a law was passed allowing such veterans, who were unable to pay the cost of private care, to be taken care of in Veterans Administration hospitals if there was space available. It is common knowledge that this privilege has been abused in the most flagrant fashion. Men driving Cadillac cars have been known to drive up to VA hospitals and claim they were unable to pay for private care. Men have been admitted to veterans hospitals with thousands of dollars in their pockets. This has not always been the fault of the VA officials because, until recently, they had no means of determining whether a veteran was unable to afford private care except his own word, which had to be taken without question.

The taking care of veterans with non-service-connected disabilities *has* caused the empire builders in the VA to clamor for more and more hospitals, even when there were plenty of vacant beds in the existing hospitals. Congressmen (statesmen?), anxious for the veterans' votes, have subserviently voted them.

Now, however, another element has crept into the ever expanding VA hospital system. Just after World War II, Dean's committees were established with the result that VA hospitals near medical schools were affiliated with the medical schools, and the medical schools furnished consultants to assist in the care of the patients. Together with this, the residency system has expanded tremendously. Now the VA officials openly say that they must have non-service-connected disability cases in order to maintain their residency training program. I don't question that, but should this program be maintained at the enormous expense of the American taxpayer? We now have a shortage of interns in most of our civilian hospitals. If the VA hospitals, which now, according to the most reliable information, have upwards of 85% of their cases with non-service-connected disabilities, were compelled to take patients with only service-connected disabilities, it is obvious that most of the hospitals would have to close or there would be a consolidation of the hospitals into a much smaller number. Would it not be better, then, to eliminate the residency training programs in veterans hospitals? This would not only ease the tax burden, but would make available more house men for civilian hospitals.

If, as is only right and proper, only veterans with service-connected disabilities get free care from the government, then there would be little excuse for the existence of VA hospitals and clinics. There are many who feel that veterans with service-connected disabilities should be taken care of in Service hospitals or preferably at their homes on a home town

care basis. Some schedule of fees such as is used by MEDICARE could be worked out to cover this program. It would be much more acceptable to the veteran and cost the taxpayer infinitely less. We now spend yearly almost a billion dollars on the medical care of veterans. (The total VA bill is 5 billions.) If only veterans with service-connected disabilities were cared for on a home town care basis nearly all of this could be saved. Indigent veterans could be taken care of locally as are other indigents.

Empire building often has funny excuses for its existence. A former chief medical officer of the Veterans Administration was heard to say that he was in favor of free medical care for all veterans and their dependents, as a means of combatting socialized medicine. How silly can one get anyway? It is obvious to most of us that the present trend towards free medical care of veterans is a long step towards that very thing. Twenty-two million veterans and their dependents would mean at least half of the population, and socialized medicine would be a *fait accompli*.

\*Dr. Amos R. Koontz (Baltimore, Maryland) is a distinguished surgeon at Johns Hopkins Hospital and a past president of the American Military Surgeons. He has long been identified with the veterans' medical care problem and is a highly respected authority in this field.

---

**PRINCIPLES OF DISABILITY EVALUATION**, by Wilmer Cauthern Smith, M. D. Pitman Medical Publishing Co., Limited, London. 1959. J. B. Lippincott Co. Phila. Price \$7.00.

This book deals with the philosophy and logic of disability evaluation. It should be of interest to those who handle workmen's compensation cases and also those who are apt to find themselves in court as a medical witness. The book deals with the basic philosophy of disability, the requisites of a good medical report, and elucidating discussions of some of the legal questions which can at times prove difficult for the medical witness. Finally there are sections with specific suggestions as to the actual evaluation of disability, however this is not tabulated as in other books of this nature such as "Disability Evaluation" by McBride. It appears to adhere to its title much more closely than other such volumes. The book would be a valuable addition to the library of anyone who at times becomes involved with forensic medicine.

B. L. Freeman, Jr., M. D.

---

**REPORT OF THE EXECUTIVE  
DIRECTOR TO THE  
STATE MEDICAL ADVISORY  
COMMITTEE OF THE  
CRIPPLED CHILDREN SOCIETY  
OF SOUTH CAROLINA, INC.  
MAY 14, 1959**

The Crippled Children Society of South Carolina is in its twenty-fifth year of operation in South Carolina with services provided in all sections of the

state and additional local services available through county chapters. Services including medical diagnosis and evaluation of the cerebral palsied, social service, physical, occupational, speech therapy, psychological evaluation, camping, recreation, and special education, were given to 10,929 handicapped South Carolinians during the past fiscal year.

89.7% of every Easter Seal dollar goes for service in South Carolina. Two per cent goes for research and 8.3% goes to the National Society for Crippled Children & Adults, Inc.

The Society supplements service at the state and local level without duplication of effort. Services are therefore tailored to fit specific needs of each community. Because of this policy of community cooperation, and because the Society offers direct service, the program of the Society is available to assist the cerebral palsied particularly and others who need help yet cannot receive it elsewhere. Services during the past year were given to the following diagnostic groups: arthritis, cerebral palsy, poliomyelitis, muscular dystrophy, multiple sclerosis, orthopedic, and speech disorders.

Monthly Cerebral Palsy diagnostic and evaluation clinics are held at State Headquarters, 1517 Laurel Street, Columbia, as a state-wide service. Initial appointments are made only on written referral from members of the South Carolina Medical Association and the American Medical Association.

CLINICS OR TREATMENT TRAINING PROGRAMS are also sponsored by 9 county chapters including Aiken, Charleston, Cherokee, Greenwood, Greenville, Rock Hill, Spartanburg, Union.

EDUCATIONAL SERVICES have been provided through seminars and workshops co-sponsored with state-supported colleges and universities. Special education classes and home-bound teaching services are co-sponsored with local or county school systems in many areas.

In a report given by A. L. M. Wiggins, chairman of the Society's Board, the Crippled Children Society has granted \$122,108.40 in Easter Seal funds to assist in the education of handicapped children in South Carolina during the past five years.

INFORMATIONAL MATERIALS have been directed by the Society to the press, wire services, magazines, television and radio, telling how and where services for the handicapped are available. The Society has educational films available on loan and is providing monthly radio and television packets, prepared under the guidance of the National Society, to step-up year-round educational efforts.

Individual PARENT CONFERENCES are arranged, as requested, with parents of handicapped children from throughout the State. Materials also used for parent training are available on loan and include audio visual aids, books, leaflets, and reprints.

The EASTER SEAL FAMILY CAMP, sponsored for families of severely handicapped mentally alert teen-agers, is a significant event in the Easter Seal service program.



The Crippled Children Society of South Carolina brings INFORMATION TO PROFESSIONAL GROUPS through Health Career packets to High School principals throughout South Carolina for use with high school students and provided staff assistance in the preparation of Health and Education guide books. Two post-graduate scholarships have been given jointly by the Crippled Children Society of South Carolina and the National Society to enable the physical and occupational therapists working in the Charleston Easter Seal program to learn the Bobath technique of treating cerebral palsies. This seminar was held at the D. T. Watson School of Physiatry, Leetsdale, Pennsylvania.

Seminars for both graduate nurses and student nurses have been conducted with 1 seminar presented on the Bobath method for the South Carolina Chapter of the American Physical Therapy Association.

Sponsored William T. Green, M. D., as guest speaker for the scientific section of the Annual Convention of the South Carolina Medical Association. Dr. Green, professor of Orthopedics at Harvard University, is also Orthopedic Surgeon-in-Chief at both the Children's Hospital and Peter Bent Brigham Hospital in Boston.

Co-sponsored with the South Carolina Rehabilitation Association the first SOUTH CAROLINA EXPOSITION ON EMPLOYMENT OF THE PHYSICALLY HANDICAPPED with live exhibits depicting various vocations open to handicapped workers. Major General Melvin J. Maas, chairman of the President's Committee on Employment of the Physically Handicapped, was the main speaker. Over 300 persons attended this conference in October.

Exhibits at major professional conventions and meetings such as the South Carolina Medical Association, South Carolina Nurses Association, South Carolina Conference on Social Work, as well as others, were a dramatic means of disseminating information about the handicapped, the part specialists can play in the Easter Seal program and the help they may draw from it for their patients, clients, etc.

The National Easter Seal RESEARCH Foundation receives 2% of all Easter Seal Funds raised in South Carolina and throughout the nation. Focus has been specifically on the search to discover new facts relating to causes, prevention, and methods of treatment of crippling conditions—the expansion and exploration of knowledge in all aspects of crippling.

Three of the 49 Easter Seal grants made to research projects throughout the nation were made to the

Medical College of South Carolina, Charleston. Thus, \$22,379.00 came into the state from the Easter Seal Research Foundation for brain research with South Carolina sending in only \$3,866.86.

Chartered in 1939 to serve the unmet needs in South Carolina, the Crippled Children Society of South Carolina is governed by a 56 member *Board of Trustees*, representing every county with additional trustees-at-large. Fifteen trustees serve on the Executive Committee.

The fifteen member MEDICAL ADVISORY COMMITTEE appointed by the South Carolina Medical Association has continued to give time and thought to assisting the Society during the past year. Many of the members of the committee have met time and again to advise and counsel with the Society's officials.

The Medical Advisory Committee's functions are:

1. To establish policy in relation to medical care.
2. To approve plans for medical care programs at Easter Seal Centers.
3. To assist with medical relationship problems which may arise from time to time.
4. To establish a program of medical supervision.
5. To participate in a broad-based public relations program geared at interesting the private physician, along with the specialist, in utilizing services of the Society to the fullest extent possible.
6. To participate in the appointment of the medical staff, subject to the approval of the Society's Board of Trustees or Executive Committee.

The following report summarizes the FINANCIAL ACTIVITIES for the past fiscal year, as prepared by A. C. Clarkson Company, certified public accountants. The complete audit is a part of the Annual Report of the Society, which is printed for distribution to the public.

Care and Treatment Services		\$132,838.53
National Society Services		15,675.41
Education and Information		11,660.14
Research		3,866.86
Fund Raising		13,042.86
Administrative Costs		
State Headquarters	\$11,621.41	
County Chapters	7,637.01	19,258.42
TOTAL (spent during the year from Easter Seal Campaign and special donations)		\$196,342.22

Rose M. Lowe





**WHERE CAN AN UNWED MOTHER GO  
FOR CONFIDENTIAL SERVICE?  
TO THE CHILDREN'S BUREAU OF  
SOUTH CAROLINA  
1001 MAIN STREET  
COLUMBIA, SOUTH CAROLINA**

*What Is The Children's Bureau?*

It is the State adoption agency and is supported by tax funds. The Bureau had its beginning in 1909 and was the Children's Home Society, a private agency supported by contributions. In 1920 the State took over the work of the Children's Home Society and has for the past 39 years helped hundreds of girls in trouble by finding suitable homes for their children.

*How Can It Help?*

The Bureau serves any mother or mother to be, married or unmarried, regardless of race or place of residence or financial situation.

The Bureau helps by counseling mothers who need help in deciding what is the best for their babies.

The Bureau helps in arranging for entrance to a maternity home (often out of the State) if the girl feels that is the best plan or for boarding care away from her community.

The Bureau helps with finances if the girl has no funds.

The Bureau helps by advising where legal problems are involved.

The Bureau helps by giving temporary boarding care for the baby while the mother is establishing a home or deciding about adoption.

The Bureau helps by placing the baby whose mother releases him early in a permanent home a few weeks after he is released to the agency

*Why Go To An Agency?*

The mother will receive sympathetic, helpful, confidential service. She will have time to talk over her problems with someone who has helped others with similar problems. She is not forced to make a quick, impulsive decision about plans for her child.

An agency is in the unique position of being able to accept custody of the child from the mother, and permit her to terminate her parental rights through Voluntary Relinquishment.

In the meantime, the agency provides physical care and medical care for the child.

Please write or call the Children's Bureau of South Carolina, 1001 Main Street, Columbia, South Carolina. Phone AL 4-7704.

---

**HOW TO PRESENT A SCIENTIFIC PAPER  
BEFORE A LARGE AUDIENCE**

The meetings of many medical societies now provide an audience that can number in the thousands, thanks to modern methods of voice amplification and visual projection. Such large audiences attract essayists whose work has won them high rank in their chosen field. Their names on programs, in turn, attract yet larger numbers. Unfortunately, a man who is top-flight as a scientist may nevertheless be most ineffectual on the lecture platform, usually because he

makes some simple but crucial mistakes in his manner of presentation. Yet every such mistake is easily avoidable. On the basis of what this writer has suffered while listening to others at important meetings in the last thirty years, he is moved to offer some suggestions to future speakers.

If you have been invited to appear on some major program, it is hoped you will scan this editorial. You might find here a point or two that will help to make your presentation a bit more effective. If so, it will have been worth both the reading and the writing.

*Time Limit:* You have been assigned a fixed time limit for your entire appearance. Please note that this is an *outside limit*, that begins with the first word of introduction by the chairman and ends with the moment when you finish, or are requested to stand down. His words deduct about twenty seconds from the total time at your disposal, and you may lose even more if you are not as close as possible to the podium when called upon.

Of course, you have given your text several time trials in advance. All too often this results in your trying to read it a bit faster next time in order to get under the wire. What you really should do is shorten the text each time that it still seems too long. This can be done without sacrificing any vital point. Merely culling unnecessary words may be enough, and it teaches you to express clearly in a few words the thought that was obscured by verbosity.

Don't forget to include in your timing the demands of your lantern slides. Their text you have reckoned, of course. But you must also allow a few seconds for calling for the next slide, for looking at the slide to orient yourself, and for any "aside" that the moment may require. If the operator of the lantern gets a slide up-side down or out of order, the time lost in correcting this is nevertheless charged against your limit.

Remember that on the platform you must speak more slowly than in a classroom without the use of a loud speaker. Public-address systems in large auditoriums produce echoes and reverberations: if you read deliberately, every word will be clearly heard; if you read rapidly, then your words will tend to run together and can become an unintelligible jargon. You should therefore allow at least 15 per cent more time for platform reading than it takes in your timed trials reading slowly before the bathroom mirror.

Remember that the paper to be printed may be a page or two longer than the one you read, without offending either the editor or the reader. But no one can speak more than a limited number of words per minute without jamming the loud speaker and losing the listener. The worst sin against the time-limit, and the best way to ruin your prospects for future invitations by all who hear you, is to try to read a 23 minute paper in 20 minutes. But a 17-minute paper possesses the best ingredient for a successful presentation.

*Microphone Technique:* When you speak to an audience numbered in the thousands, you are 100 per

cent dependent upon the correct use of the microphone 100 per cent of the time. If your technique is only 98 per cent correct, or if it is perfect only 98 per cent of the time, you will probably fail to get across far more than 2 per cent of your message, because the very words that failed to get through may have been the whole key to your thesis.

The microphone has strict limitations of performance which you must recognize. It magnifies by a *fixed* number that which you put into it. If it is *fixed* in space (for example, the microphone on the lectern), then you must maintain a *fixed distance* between your mouth and the microphone. This is best accomplished by holding with one hand to the edge of the lectern from start to finish. If you rock back and forth on your feet as you speak, or if you alternate between standing up straight and leaning confidentially on the lectern, you will alternately shout or whisper to your audience.

Your voice has its limitations, too. The chief ones are *direction*, *loudness* and *pitch*. The *direction* of your voice is straight *forward* and slightly *downward* from your mouth in a rather *narrow* beam. You should therefore speak only when facing the microphone, which should be at a level slightly *below* that of your mouth. The microphone will lose you, if you turn away and speak while looking at a lantern slide. Therefore, if you use slides, turn a moment in silence to see that the slide is right, then turn back to the microphone before you speak again. To a lesser extent, the microphone will lose you if your head bobs up and down as you look now at the audience, and now at your manuscript, especially if the microphone is at a *higher* level than your mouth.

*Loudness* of your voice is in part a factor of the effort you put into it. But loudness is also related to *pitch*: the lower the pitch, the less loud the sound you produce. When you speak in a conversational tone in a small group, the ends of your sentences are audible only to those nearest you. If you are a good speaker in a class room without the aid of an amplifier, it is because you have learned to keep both loudness and pitch up, so that the man in the back row can hear each word.

The microphone is rather like a person with catarrhal deafness: it hears you well only while you keep the pitch of your voice up, and the loudness adequate. But it fails to hear you if pitch or loudness falls too low. What is equally important, if you speak too loudly, your voice blares and becomes painfully unintelligible.

*Loudness*, as picked up by the microphone, varies to an extreme degree with the distance between mouth and microphone. If that distance is only one or two inches, then the voice should be soft, low-pitched and confidential, and the same distance must be scrupulously maintained to avoid wide output fluctuations. This is a method that expert announcers use to good advantage. On a speaker's platform it is useful only if there is a portable microphone that can be held evenly and constantly before the mouth as

the speaker points to slides, looks at people on the platform or moves about. It is not a good method when there is a fixed microphone and you are reading from a text.

If the distance between mouth and microphone is too great, then the man at the controls of the amplifier is forced to turn up full power in the attempt to catch your voice. If you are not too far away, he may succeed; but often he only produces a loud ringing screech that stops the entire proceedings.

The *best distance* between mouth and a fixed lectern microphone is 7 to 10 inches: at this distance, minor movements of the head produce less fluctuation in loud-speaker output than do the same movements when you are only an inch or so away. The distance is easy to measure by the span of the hand: thumb your chin (not your nose) to the microphone.

The most desirable *loudness* at this distance is that which you would use in speaking to a group of fifty in a classroom being careful not to drop the pitch too low at the ends of sentences.

Nothing must come between your mouth and the microphone. Every time you scratch your nose or rub your lip, your hand sharply reduces the volume of sound delivered. It is even worse to hold your manuscript in such a way as to blanket the microphone.

*Lantern Slides*: Visual aid by lantern slides is extremely useful to illustrate something by picture, to convey a concept by diagram, and to emphasize salient facts or data, provided your slide technique is good. But a poor *slide technique* can ruin your presentation even more surely than can any of the mistakes thus far mentioned. Here are the chief points to be kept in mind to get the best results:

The *number* of slides to be shown is a function of the time limit assigned. It usually takes over one minute per slide: very few take less and some considerably more. Repeated time trials for the slides are more important to make than those for text, since slides are more likely to go overtime and harder to speed up.

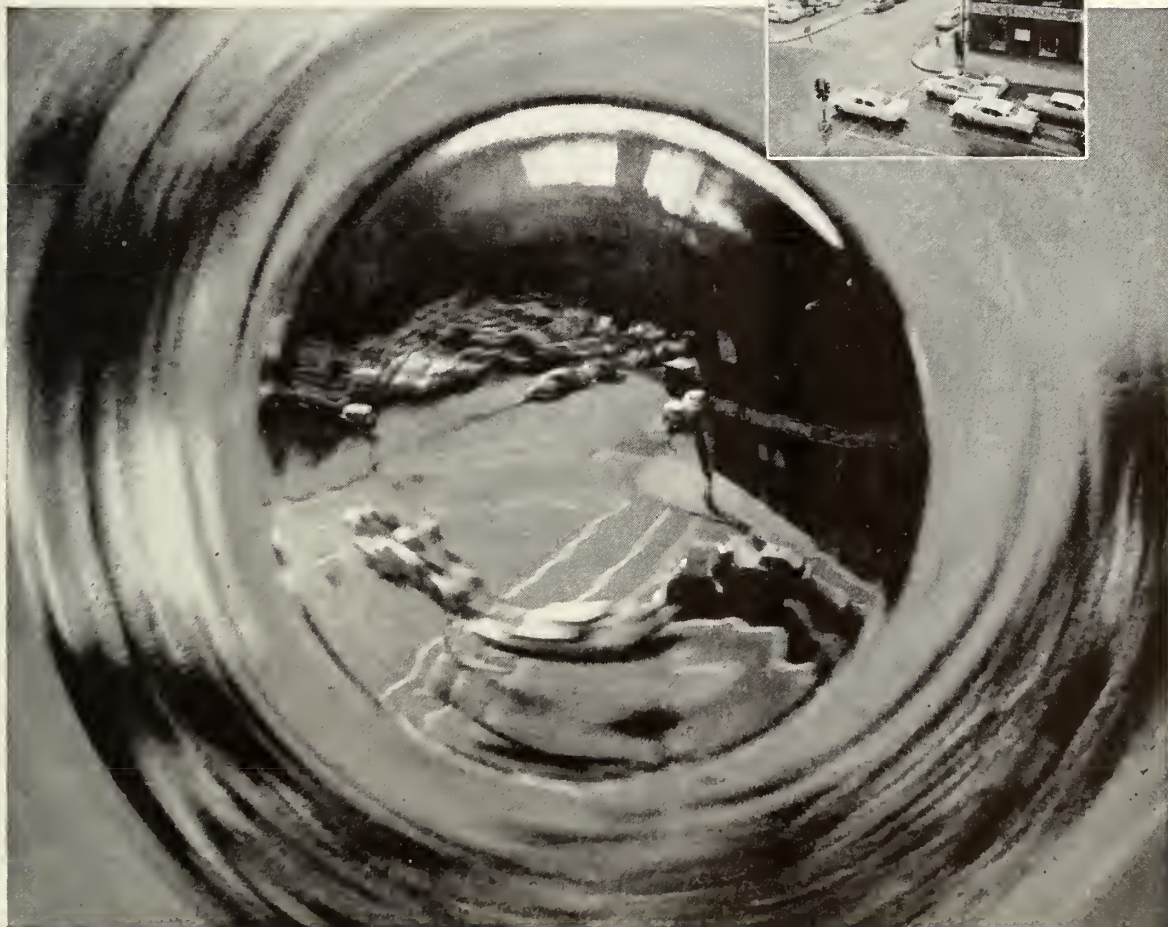
The *size* of slides should correspond, whenever possible, to that of the standard projector available: 3¼ by 4 inches. If for any reason some other size must be used, be sure not only to get confirmation in writing, and well in advance, of the availability of the size and type of projector you require, but to verify its presence before the meeting starts.

Have your material *centered* and well within the projectable portion of the slide. This will save you the embarrassment of having a picture decapitated, or the total at the foot of a column chopped off, or the beginnings or ends of lines of text deleted, and also the unanticipated loss of time in asking the operator to shift the slide or raise or lower the lantern.

Top and bottom are cut off more frequently, especially if you arrange your material in a rectangle whose long dimension is perpendicular. Such slides work perfectly in all classrooms, where the screen is *square*. But in nearly every large auditorium, the screen is *rectangular*, with the long dimension *hori-*



**CONTROL  
VERTIGO, DIZZINESS...  
AND  
ELEVATE THE  
MOOD**



with **Dramamine-D<sup>®</sup>**

brand of dimenhydrinate with dextro-amphetamine sulfate

"Disturbances of balance resulting from vestibular disorders have long been known to lead to severe anxiety."\*

Vertigo—whether of organic or functional origin—tends to leave depression in its wake. Dramamine-D is a therapeutic combination designed for treatment of the entire vertigo-reaction syndrome. Each tablet contains dimenhydrinate (50 mg.) to control dizziness, and dextro-amphetamine sulfate (5 mg.) to elevate the mood.

\*Pratt, R. T. C., and McKenzie, W.: Anxiety States Following Vestibular Disorders, *Lancet* 2:347 (Aug. 16) 1958.

**Dramamine<sup>®</sup>** available as tablets, ampuls, liquid, suppositories

Research in the Service of Medicine

**SEARLE**



zontal, because the screen is intended primarily and solely for the projection of motion picture film, whose frames are rectangles that are invariably horizontal.

But the lateral edges are also vulnerable, because in a large auditorium the projection lantern is placed as far back as possible in order to get the maximum of magnification which the full width of the screen will allow. Therefore, use a *mat*, to be sure your material is properly centered and limited: the opening of the mat should not exceed 2½ by 3 inches.

If the slide presents a *picture* or a *photomicrograph*, make use of such devices as an arrow, or circle, to call prompt attention to the important features. As you talk about the slide, you can then mention the ringed area, without using the pointer that someone forget to provide. Be sure to write out every word of your comment on the slide, so that it, too, will be properly timed.

The use of the *electric torch: arrow pointer* calls for comment. Get to the meeting place early to familiarize yourself with this useful gadget. In using it, point it at once to the item you mean to stress, and turn it off promptly when that purpose has been served, or else point it directly at your feet until you need it again. It is most disconcerting for the audience to follow the arrow's aimless wanderings all over the screen in anticipation of another point of emphasis that never comes. Between applications, don't shine it in the faces of those in the front row, or that of the chairman.

If the slide presents a *diagram* or *figure*, this should be so *simple* that it can be grasped within seconds and understood without reference to a blue print. The use of *contrasting colors* makes the figure more intelligible and easier to explain.

If the slide presents *data*, these should be minimal in number. Those which are most significant should be so designated by means of contrasting colors, or bold-faced type, or underlining, or combinations of these devices.

If the slide presents *facts* in text form, they should be few, arranged preferably in outline form, and with the separate members of the outline identified by numbers.

In planning the *arrangement* of all slide material, take a leaf out of the book of the commercial advertiser. He knows he has only seconds to catch the eye of the public: so he uses the simplest picture, the fewest words, the brightest colors, the biggest type for the most important thought, all to make the most striking effect at a glance.

*Visibility by the man in the last row* is the chief factor that limits the amount of material that should go on a slide. In order to be just legible, the width of every part of a letter must subtend an angle of 1', and the height and width of the whole letter must subtend an angle of 5'; that is, an angle whose apex is at the pupil of the viewer and which has an opening of 5', the overall dimension of the letter. This fact is the basis of the Snellen Test Chart for measuring visual acuity. Now to subtend an angle of 5' at

the pupil of the man in the last row 200 feet from the screen, the letter on the screen must be 3 inches high and wide. (Multiply the distance from the screen by 0.001425 to get the dimension of the letter.) If the screen is 15 feet wide, then a single line of text on the screen can have no more than 60 letters and spaces, if that text is to be *just readable* by a man in the last row, if he has 20/20 vision. To be *easily readable*, the line must have decidedly fewer letters and spaces. To be safe in planning your slides, you must know the size of the screen and its distance from the back row.

*Leave the slide on the screen long enough* for everyone to read it. This usually takes half-again as long for the other fellow as it does for you, so give him a break in your timing.

It is better to *signal for the next slide with a buzzer* or "clicker," if available, than to say "next slide," lest the operator mistake a word in your text for such a signal. A recent speaker lost valuable time because the operator shifted slides when he heard the word, "Dextran."

These have been the "*Do's*" to be observed in lantern slide technic. Even more important are the "*Don't's*."

The most important one is this: *Don't put too much on a slide*. If it is a picture or a photomicrograph, don't have too much irrelevant material, such as the whole cross-section of an organ, thereby dwarfing into insignificance the crucial part of the picture. If you wish to show proportion or relations, then use a second slide for further detail.

*Don't project a complicated diagram*: it takes too long to decipher.

*Don't put too many data on a single slide*, especially irrelevant data. Yet this unhappy mistake is the one most frequently committed: the author is too lazy to construct a brief summary of salient data, so he photographs instead a detailed table that will occupy a full page in the printed paper.

*Don't project whole paragraphs of running text*. Use outline form and telegraphic style to get the few important facts across most quickly. If there are more facts, use two slides.

*Don't distract your audience* in any of the following ways: Don't talk away from the slide on the screen: your comments should be to emphasize or amplify what is in sight, not to present new ideas. Don't leave a slide on the screen when it is no longer needed. If you have something new to say before going on to the next slide, ask for "lights, please," or signal the operator by means of a blank slide or by a white card properly placed in your series of slides.

*Don't frustrate your audience* by whisking a slide off the screen before they have had time to read it.

*Don't waste the time of your audience* by reading every word and figure on the screen. They can read, too, so confine yourself to brief relevant comments.

*Don't use slides with white letters on a black background*: their visibility is much less than that of slides with black letters on a white background.

These, then, are the general principles that underlie the proper and effective presentation of a scientific paper before a large audience, and to these the writer has decided to confine himself. But please do not think that your personal problems in presentation have been fully covered in the foregoing advice. They require special study and individual analysis.

Fortunately, you don't have to depend upon your best friend or severest critic to do this for you, although they can be most helpful. It is today a simple and inexpensive matter to have a tape recording made of one of your efforts at public speaking. Then, at first alone, and later in the company of an honest critic, play it back to yourself many times, making notes and encouraging the critic to interrupt.

When you have recovered from the first shock of hearing the voice of an utter stranger come back to you out of the machine, you can begin objectively to assess your most obvious mistakes of presentation: the hurried delivery, the monotonous intonation, the failure to pause between paragraphs, or before important points, as you race through your text. Then, at times when you leave your script and "ad lib" a bit, note the slowness, also the hesitation as you grope for the next word; the falling pitch that kills the ends of sentences, especially if the last word is a proper noun; and all the irrelevant "ah's" and "uh's" that eat up so much precious time; and the disconcerting noises, when every few sentences you nervously clear your throat.

Now, if your ego can still take it, have a motion-

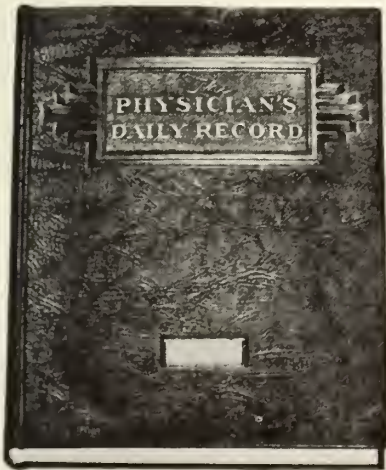
picture as well as a sound-track recording made of one of your presentations. See for yourself your distracting, and therefore undesirable habit of scratching your face, rubbing your nose, twisting your ear or tugging on a lock of hair. Do you ever look at the people you are trying to impress, or are your eyes glued to your manuscript? And what of your gestures? Gestures, like spices, add zest and interest, if unobtrusive, appropriate to the matter in hand, and if used sparingly; but better no gestures than too many or the wrong ones, awkwardly made. Their proper use calls for native talent as well as careful training.

This article has been written about the proper presentation of a scientific paper, an infrequent and ephemeral activity, indeed, as far as most of us are concerned. Yet it is an aspect and an actual part of a much more important function in the lives of most of us who present papers: the function of teaching. If you are a teacher, then regardless of your specialty in medical science or practice, you should realize that medical pedagogy is as much a specialty as is chemistry or pediatrics. If you are a teacher, it is your responsibility to perfect yourself in pedagogy as well as in your branch of knowledge, in order to bring your teaching mission to its highest fruition: not only to know, but to be able to impart to others what you know. If you are or hope to be a teacher, this editorial deserves a second reading.

RICHARD A. KERN, M.D., F.A.C.P.

Reprinted by permission from the *Annals of Internal Medicine*.

## CUT BOOKKEEPING — OFFICE AND TAX EXPENSES TO A MINIMUM USE



### "The Physician's Daily Record"

RECOMMENDED BY  
TAX EXPERTS AND ACCOUNTANTS

Income—Professional and Non Professional Recorded Daily

Expenses—Professional and Non Professional—Deductable—Non Deductable Segregated

Daily Cash Reconciliation—Monthly Balances Business Volume and Net Profit Summarized Monthly

Accounts Receivable Control Each Month Guards Against "Slip Ups" on Charges and Payments

Pay Roll—Social Security—Withholding Tax.  
*Place your order early*

#### A PERMANENT RECORD OF EVERY BUSINESS TRANSACTION

Single Book for 1960 (One Page—44 lines—For Each Day)-----\$ 8.50

Double Book for 1960 (Two Pages—88 lines—For Each Day)-----\$16.00



**W i n c h e s t e r**

CAROLINAS HOUSE OF SERVICE



**Winchester Surgical Supply Co.**  
119 East 7th St. Tel. 2-4109 Charlotte, N.C.

**Winchester-Ritch Surgical Co.**  
421 W. Smith St. Tel. 5656 Greensboro, N.C.





**Posture** IS A PLUS  
YOU CAN GET FROM SLEEPING...  
THAT'S WHY IT'S WISE TO SLEEP ON A

## Sealy POSTUREPEDIC®

Uniformly firm, Sealy Posturepedic keeps the spine level. Healthfully comfortable, it permits proper relaxation of musculatory system and limbs. Exclusive "live-action" coils support curved, fleshy contours of the body, assuring relaxing rest that you know is basic to good health... and good posture.



A Sagging  
Mattress Can  
Cause This!

Look, Feel  
Better On A  
Posturepedic

PROFESSIONAL  
DISCOUNT  
OF **\$39.00**

Limit of one full or  
two twin size sets

Please check preference

So that you as a physician can judge the distinctive features of the Sealy Posturepedic mattress for yourself before you recommend it to your patients, Sealy offers a special Doctor's Discount on this mattress and foundation, when purchased for your personal use.

### SEALY MATTRESS COMPANY

666 Lake Shore Drive, Chicago 11, Illinois

	RETAIL	PROFESSIONAL
Pasturepedic Mattress	each \$79.50	odd state   \$60.00
Pasturepedic Foundation	each \$79.50	tax   \$60.00

1 Full size ( ) 1 Twin size ( ) 2 Twin size ( )  
Enclosed is my check and letterhead.

Please send my Sealy Posturepedic Set(s) to:

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

### ADVERTISERS

Abbott Laboratories  
American Medical Assn.  
Ames Company  
Appalachian Hall  
Benton Laboratories  
Blue Shield  
Brawner's Sanitarium  
Burroughs-Wellcome & Co.  
Charles C. Haskell Co.  
Coca-Cola Company, The  
Davies, Rose & Co., Ltd.  
Drug Specialties  
Eli Lilly & Company  
Estes Surgical Supply Co.  
Highland Hospital  
Irwin, Neisler & Co.  
Jones & Vaughan, Inc.  
Kent Cigarettes  
Lederle Laboratories  
Mayrand, Inc.  
Merch, Sharp & Dohme  
Parke, Davis & Company  
Pfizer Laboratories  
Physicians Casualty Company  
Physicians Products Co.  
Pinebluff Sanitarium  
Professional Management South  
Purdue Frederick Co.  
Charlotte T. Pyatt  
Riker Laboratories, Inc.  
A. H. Robins Co., Inc.  
J. B. Roerig & Co.  
Sandoz Pharmaceuticals  
Schering Corporation  
Sealy of the Carolinas  
G. D. Searle & Co.  
Smith-Dorsey  
Smith, Kline, & French  
E. R. Squibb & Sons  
St. Paul Fire & Marine Ins. Co.  
United States Brewers Foundation  
Upjohn Company  
Wallace Laboratories  
Wampole Laboratories  
Waverley Sanitarium, Inc.  
Wesson Oil & Snowdrift Sales Co.  
Winchester Surgical Supply Co.  
Winthrop Laboratories, Inc.  
World Insurance Co.



# The Journal

of the

## South Carolina Medical Association

VOLUME LV

November, 1959

NUMBER 11

### VESICO-URETERAL REFLUX IN CHILDREN DIAGNOSIS AND MANAGEMENT

VICTOR A. POLITANO, M. D.

Vesico-ureteral reflux is the regurgitation of urine, once it has entered the bladder, into the ureter. For many years there has been intense speculation with conflicting opinions as to whether reflux occurs in a normal person. Text books and current literature express divergent thoughts on this problem. A critical review of the literature would indicate that vesico-ureteral reflux does not occur normally, and when it is observed, is usually associated with some other urologic disease. A question that immediately comes to mind regarding this subject is whether it occurs frequently enough to be considered a major topic for discussion.

#### *Occurrence*

Campbell<sup>1</sup> surveyed 722 cystograms done in infants and children and was unable to demonstrate reflux in the absence of some other associated urologic problem. Gibson<sup>2</sup> found reflux present in only 2 of 42 children whose urinary tracts were apparently normal. Jones and Headstream<sup>3</sup> observed reflux in only 1 of 100 normal children ranging from ages 14 days to 14 years. The one child with reflux was found to be carrying 180 ml. residual urine and was treated by transurethral resection of the vesical neck. Bunge<sup>4</sup> examined a group of children ranging in ages from 9 to 15 months and was unable to demonstrate this condition. In our own rather large study of normal children we have not demonstrated reflux in a single case to date. The absence of reflux in

normal children is impressive when compared to the frequency with which it occurs with demonstrable or co-existing uropathy. Bum-pas<sup>5</sup> observed reflux in 8.6% of cystograms showing other urologic problems. Twelve per cent of cystograms reviewed by Campbell demonstrated reflux in children with co-existing urologic diseases. St. Martin and others<sup>6</sup> noted reflux in 13.5% of children investigated because of urologic symptoms. Roughly then, 10 to 12% of children presenting with urologic complaints will demonstrate vesicoureteral reflux.

#### *Diagnosis*

The frequency with which this condition is diagnosed is dependent to a large extent on the index of suspicion by the examining physician and the thoroughness in which his examination is performed. The diagnosis is usually simple to make and is demonstrated by cystography. A small catheter is introduced through the urethra into the bladder, and from 60-100 ml. of sodium iodide or a similar contrast substance is injected into the bladder. The catheter is removed, and the child is instructed not to void for 20 or 30 minutes. An x-ray film is taken at the end of this time. If reflux is not demonstrated in the delayed cystogram, an exposure is taken while the child is voiding. In our experience, voiding cystourethrograms have been more informative than delayed cystograms alone. In the very young child it may be difficult to get a good voiding film. The same result can be obtained if the child can be made to cry. Every child with re-

Department of Urology, Duke University Medical Center, Durham, North Carolina.

peated urinary tract infections, residual urine, unexplained fevers, vague abdominal complaints or flank pain, should be studied by cystography. There is a tendency to eliminate this valuable diagnostic procedure when intravenous pyelograms have been reported as normal. It must be remembered that approximately 70% of patients that demonstrate vesico-ureteral reflux, even with advanced changes, will show essentially normal intravenous pyelograms.

### *Management*

Several factors may contribute or be responsible for the occurrence of vesico-ureteral reflux. The management of this problem will vary with the factors responsible. In most instances, infection is present and is usually the presenting symptom. Infection may produce fibrosis and fixation of the ureter with loss of elasticity of the intra-mural ureter, thus destroying the valve-like action of this segment of ureter. Congenital anomalies such as ectopic ureteral orifices, maldevelopment of the trigone, or decrease in the length or obliquity of the intra-mural ureter may be responsible. Reflux is often demonstrated with neurogenic disorders of the bladder. Obstructions to the vesical outlet, such as contractures, median bars, posterior urethral valves, or strictures of the urethra are an important contributing causes. Reflux may result from trauma to the

intra-mural ureter incident to surgery of ureteroceles, meatotomies, or transurethral resections. Once the diagnosis has been established, every effort should be made to eliminate the process, which if allowed to continue, will inevitably destroy the kidney. Infections, when present, should be eradicated. This may be difficult or even impossible in the presence of large dilated tortuous ureters or with residual urine. Neurogenic disorders should be corrected with appropriate drug therapy or surgical modification of the neurologic deficit when possible. Residual urine secondary to vesical neck obstruction must be eliminated. This may be accomplished by catheter drainage, multiple voidings, urethral dilatations, or transurethral or open resection of the vesical neck or other obstructing lesion. Every conservative effort to eliminate reflux should be attempted first. If the more conservative measures have failed to resolve the problem, a direct attack on the intra-mural ureter may be necessary. The creation of a submucosal tunnel, described three years ago, has been most successful in correcting vesico-ureteral reflux without producing obstruction to the efflux of urine.<sup>7</sup>

### *Case 1*

The patient was a 4 year old white girl admitted with a five-month history of intermittent fever with temperature elevations to 105° F. occurring every three to four days. She had mild irritative symptoms



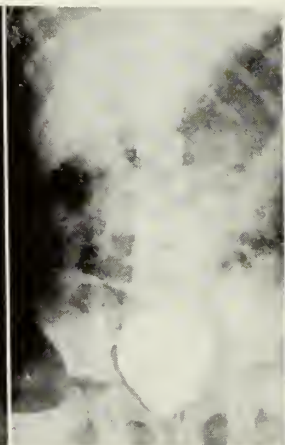
*Fig. 1A Case 1.*

*Preoperative intravenous pyelograms showing blunting of the calyces on the left with a bifid kidney and ureter.*



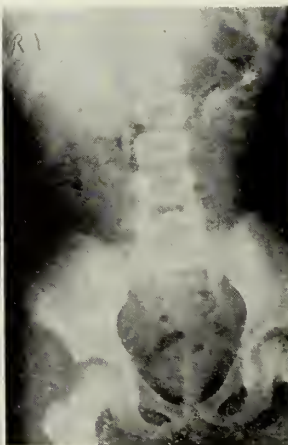
*Fig. 1B*

*Preoperative cystogram-reflux, left. Contrast media in the right pelvis represents continued excretion from intravenous pyelograms.*



*Fig. 1C*

*Postoperative cystogram demonstrates absence of reflux.*



*Fig. 1D*

*Postoperative intravenous pyelogram shows essentially same calyceal pattern as preoperative films.*

on voiding, consisting of burning and frequency. Her fever was controlled with Gantrisin, (acetyl sulfisoxazole) which she had been taking for six weeks prior to admission.

On physical examination her temperature was 100.2° F., pulse 90, respirations 25, and blood pressure 98 mm/Hg. systolic, 76 diastolic. She was a small but otherwise normally developed child.

Laboratory studies showed a hemoglobin of 12.6 Gm. with a white blood count of 11,000 cu/mm. Her urinalysis contained 20 to 25 white blood cells and 10 red blood cells per high powered field. The non-protein nitrogen was 34 mg. per 100 ml.

Intravenous pyelograms (fig. 1a) showed slight hydronephrosis of a double left kidney with blunting of the calyces. There was partial reduplication of the left ureter. A cystogram (fig. 1b) demonstrated immediate ureteral reflux on the left.

On cystoscopic examination the left ureteral orifice was found to be lateral to the trigone and sitting high on the left lateral portion of the bladder wall. The right ureteral orifice was in its normal anatomic position. The bladder outlet was considered normal.

The diagnosis was ectopic ureteral insertion with ureteral reflux and pyelonephritis on the left side.

Treatment consisted of reimplantation of the left ureter by creation of a submucosal tunnel. This successfully corrected the vesico-ureteral reflux (fig. 1c). Postoperative intravenous pyelograms showed good excretion from the left kidney without evidence of obstruction (fig. 1d). The child has remained asymptomatic for a period of 40 months. Microscopic examination of urine was negative, and cultures have been sterile.

## Case 2

A 12 year old white boy was referred because of bilateral hydroureters and hydronephrosis. There was a two-year history of enuresis. Eight months prior to his first admission to another hospital, fever, chills, nausea, and vomiting developed. There was right flank pain, which was often relieved by voiding. His studies at that time revealed a bilateral hydronephrosis. A diagnosis of vesical neck obstruction was made, and a partial cystectomy and Bradford-Young procedure were performed. He was kept on suprapubic catheter drainage over a long period to allow the upper urinary tract to drain more adequately. On removal of the suprapubic catheter, his symptoms recurred. The hydronephrosis became progressive. On admission to this hospital he was found to carry residual urine of between 150 to 200 ml. A diagnosis of posterior urethral valves was made, and these were resected. This procedure eliminated the residual urine and enuresis. Because of the marked hydronephrosis and hydroureters, he was kept on catheter drainage for an additional five months.

On physical examination his temperature was 98° F., pulse 100, respirations 25, blood pressure, 120 systolic, 80 diastolic. He was a well nourished boy, but small for his age. There was a well healed lower abdominal scar.

Laboratory studies showed a hemoglobin of 15.6 Gm. and a white blood count of 11,800 cu/mm. The urine was loaded with white blood cells and an occasional red blood cell. Urine cultures grew *Escherichia coli* and *Proteus vulgaris*. Nonprotein nitrogen was 24 mg. per 100 ml.

Intravenous pyelogram (fig. 2a) demonstrated ad-

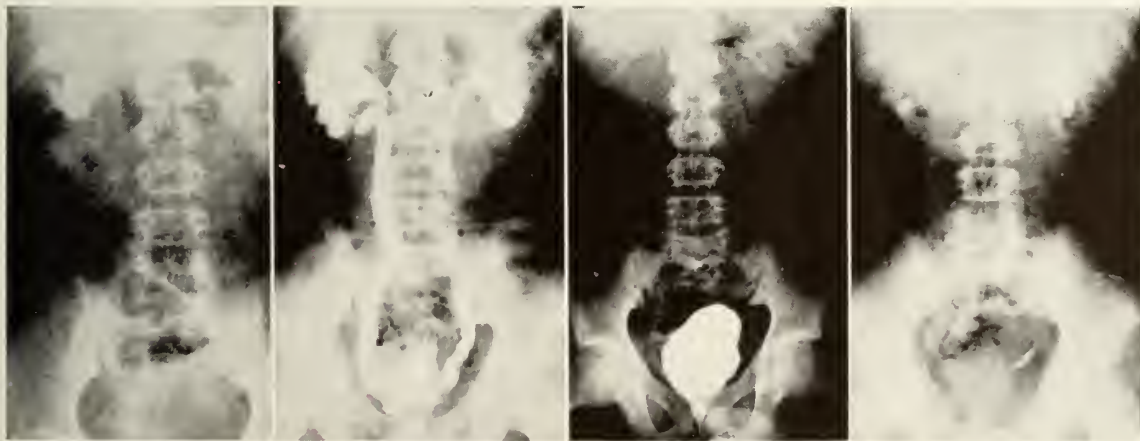


Fig. 2A Case 2

Preoperative intravenous pyelograms show delayed and diminished function with bilateral hydronephrosis and hydroureters.

Fig. 2B

Preoperative cystogram exhibits immediate bilateral reflux with hydroureters and hydronephrosis. Bladder trabeculation present.

Fig. 2C

Postoperative cystogram. Reflux has been corrected.

Fig. 2D

Postoperative intravenous pyelograms show marked improvement of function and decrease of hydronephrosis and hydroureters.



vanced hydronephrosis and hydroureters bilaterally. There was a lateral displacement of the sacrum and coccyx to the right. Cystograms (fig. 2b) revealed immediate reflux with dilatation of the ureters and calyces.

Cystoscopy revealed a trabeculated bladder with chronic cystitis and inflammatory changes. The vesical neck and prostatic urethra appeared normal.

Cystometrograms were unsatisfactory because of the severe flank pain produced by free reflux on filling of the bladder.

Preoperative diagnosis was bilateral vesico-ureteral reflux. Some neurogenic disturbance of the bladder was strongly suspected as well.

Treatment consisted of bilateral reimplantation of the ureters by a submucosal tunnel. This was successful in correcting the vesico-ureteral reflux (fig. 2c). There was marked improvement of the pre-existing hydronephrosis and hydroureters by excretory urography (fig. 2d). During a year's observation the urine has shown from 6 to 8 white blood cells. He has on occasions shown some bacilli. However, he has had no further recurrence of fever and chills, and the flank pain has been eliminated.

### Case 3

A 6 year old white child gave a history of recurrent fever and chills over a period of two years. One year

ferred to this hospital for further evaluation and treatment.

On physical examination his temperature was 99°F., pulse 92, respirations 20, and blood pressure 120 systolic, 60 diastolic. He was a normally developed child. There was a well healed scar on the left flank.

Laboratory studies revealed a hemoglobin of 12.8 Gm. and a white blood count of 10,000 cu/mm. Urinalysis showed 10 to 15 white blood cells per high powered field. Urine cultures grew *E. coli*. Non-protein nitrogen was 40 mg. per 100 ml.

Intravenous pyelograms (fig. 3a) showed a left hydronephrotic double kidney prior to nephrectomy. Intravenous pyelograms at this hospital showed a normal appearing right kidney with good function (fig. 3b). Voiding cystourethograms (fig. 3c) demonstrated immediate reflux to the right kidney, with marked distention of the renal pelvis and reduplication of the ureters on the left side.

Cystoscopy revealed trabeculation of the bladder, early cellul formation, and a moderate contracture of the vesical outlet with a small median bar.

The preoperative diagnosis was contracture of the vesical neck with median bar formation, bilateral reflux, and reduplication of the left ureters.

The operative treatment consisted of excision of the double ureters on the left, reimplantation of the right



Fig. 3A Case 3

Intravenous pyelograms made prior to left nephrectomy shows a double kidney on the left with hydronephrosis of the inferior portion.

Fig. 3B

Preoperative voiding cystourethrogram demonstrated the extreme dilation of the renal pelvis produced with voiding pressures in the presence of reflux. (The syringe is being used to deflect the voided stream).

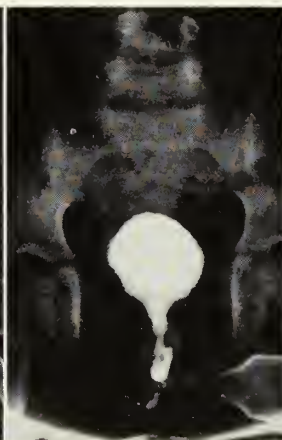
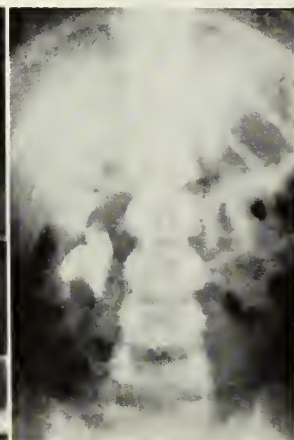


Fig. 3C

Postoperative voiding cystogram. Reflux on the right has been corrected. The ureters on the left were removed. (Note improvement in bladder outlet).

Fig. 3D

Post-reimplantation intravenous pyelogram. Note absence of dilation of either calyces or ureter.



prior to admission he had several episodes of stomach "upsets", with cramps and difficulty in voiding. Studies at another hospital revealed infected urine and a left hydronephrosis. A left nephrectomy was performed. His symptoms persisted, and he was re-

ferred to this hospital for further evaluation and treatment. On physical examination his temperature was 99°F., pulse 92, respirations 20, and blood pressure 120 systolic, 60 diastolic. He was a normally developed child. There was a well healed scar on the left flank.

a normal excretory pyelogram (fig. 3e). The child's urine has remained negative. Urine cultures have been sterile, and he has remained completely asymptomatic. He has been observed over a period of two years.

### Summary

Approximately ten per cent of children with urologic problems will demonstrate vesico-ureteral reflux. When present, this condition must be considered abnormal and treatment instituted to eliminate this condition. Delayed or voiding cystograms must become a part of the urologic workup in any child with recurrent infections. This condition, if allowed to go untreated, will eventually lead to total renal destruction either from progressively increasing back pressure or from repeated infections. Unrecognized vesico-urcteral reflux may well

be the explanation and etiologic factor in many adults seen in the terminal stages of chronic pyelonephritis. Conservative measures directed at eliminating the cause or contributing factors should be tried first. If these fail, reimplantation of the ureters becomes a necessity to prevent total renal injury or damage.

### REFERENCES

1. Campbell, M.: Urology. W. B. Saunders C., 1954.
2. Gibson, H. M.: Ureteral reflux in the normal child. J. Urol., 62:40, 1949.
3. Jones, B. W. and Headstream, J. W.: Vesicoureteral reflux in children. J. Urol., 80:114, 1958.
4. Bunge, R. G.: Further observations with delayed cystograms. J. Urol., 71:427, 1954.
5. Bumpas, H. C.: Urinary reflux. J. Urol., 12:341, 1924.
6. St. Martin, E. C., Campbell, J. H. and Pasquier., Cystography in children. J. Urol., 75:151, 1956.
7. Politano, V. A. and Leadbetter, W. F.: An operative technique for the correction of vesicoureteral reflux. J. Urol., 79:932, 1958.

## SURGERY FOR DEAFNESS

J. BROWN FARRIOR, M. D.  
Tampa, Florida

### PART I STAPES, VEIN GRAFT AND FENESTRATION

### PART II TYMPANOPLASTY

In the past few years there have been more advances in the surgery for deafness than had occurred since the beginning of time. These advances began with the fenestration operation for otosclerosis,<sup>1</sup> followed by the indirect mobilization of the total stapes.<sup>2</sup> Now, with microscopic study of the stapes, we have many varieties of stapes operation designed to work around rather than through the otosclerosis and thereby to increase quantitatively and qualitatively the lasting restoration of hearing.<sup>3-6</sup> Concomitantly the five types of tympanoplasties have been developed to close perforations in the ear drum and to reconstruct a hearing ear<sup>7, 8</sup> in chronic otitis. These are changing times. The purpose of this presentation is to acquaint you with what your otologist can do for your hard-of-hearing patient,

whether the cause is otosclerosis or a perforated ear drum.

### PART I STAPES OPERATIONS MOBILIZATIONS AND VEIN GRAFTS

#### Introduction

The deafness in otosclerosis is caused by small overgrowth of bone which immobilizes the stapes and seals the inner ear. This growth of bone varies greatly in size, character, and location.<sup>9</sup> The growth of bone may be thin and fix only a margin of the footplate of the stapes, or it may be thicker and fix one or both crura (legs) of the stapes, or it may even completely obliterate the oval window niche.

The original indirect total stapes mobilization operation produced lasting results only in the smallest, thinnest otosclerotic lesions. With the indirect techniques, the entire stapes was mobilized by pressure on the incus, (Fig. 1)

Presented at the meeting of the South Carolina Medical Association, Columbia, S. C., May 14, 1959. Adapted from "Surgery for Deafness", Miss. Med. Jn. 1959.



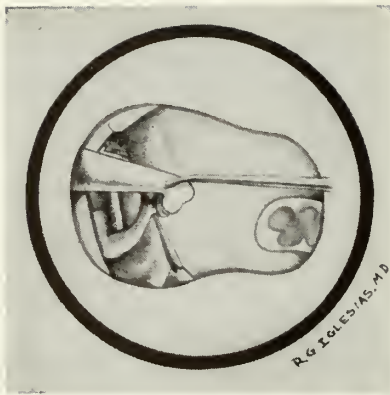


Fig. 1. The original indirect mobilization of the total stapes, with the force directed at the incus, head or neck of the stapes, is now indicated only when the stapes is deeply placed and there is very limited otosclerosis fixing the anterior footplate. The original total stapes mobilization gave a lasting hearing improvement in about a third of cases. The newer techniques, which by-pass the otosclerosis, have more than doubled the good results.

head or neck of the stapes (Rosen).<sup>2</sup> The crura frequently fractured, or the growth of otosclerosis refixed the stapes because of crural otosclerosis. Current stapes operations are designed to by-pass the otosclerosis and work through normal stapedial footplate (Farrior).<sup>10</sup>

When the anterior leg of the stapes is cemented in the otosclerotic bone, a section of this leg must be removed to permit the free movement of the posterior half of the footplate of the stapes and the back leg of the stapes (Fig. 2). The removal of a portion of

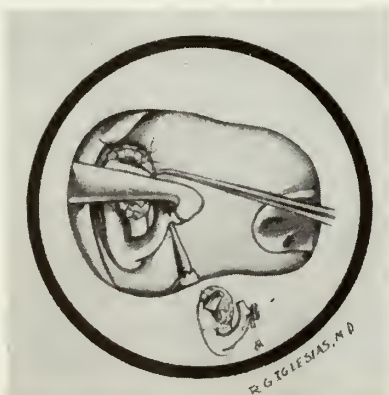


Fig. 2. When the anterior crus (front leg) of the stapes is cemented in the otosclerotic area, a section of the anterior crus must be removed. This is called an anterior crurotomy and is accompanied by mobilization of the posterior half of the footplate and the posterior crus, (leg). Anterior crurotomy is one of the best operations on the stapes giving the best results quantitatively and qualitatively.

this anterior crus is called an anterior crurotomy. The anterior crurotomy is one of the best operations on the stapes. It is the operation of choice in all anterior otosclerotic lesions because it gives the best hearing with the least tendency toward refixation.

When both crura of the stapes are cemented in the otosclerotic area (Fig. 3), special sur-

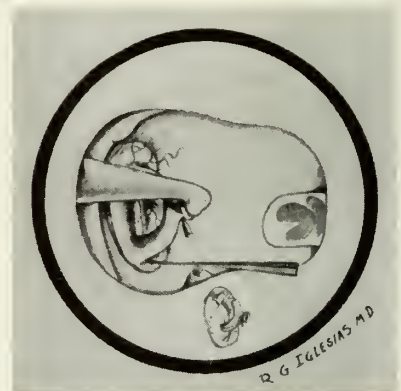


Fig. 3. When both crura of the stapes are cemented in the otosclerotic area, special techniques are required, depending upon the width of the oval window niche. When the oval window niche is wide, the posterior crus may be chiseled out of the otosclerotic area and repositioned over the central area of mobilized normal footplate (see illustrations). When the oval window niche is narrow the otologist inserts artificial stapedial crura of polyethylene or stainless steel.

gical techniques are required to prevent refixation. When the oval window niche is wide, crural repositioning is the procedure of choice; in this procedure the back leg (posterior crus) of the stapes is chiseled out of the otosclerotic site and repositioned over the central mobilized impacted area of normal footplate (Farrior<sup>4</sup>.) A narrow oval window niche, or surgical or pathological destruction of the crura, requires artificial crura made either of polyethylene tubing or fine, stainless steel wire. These special surgical techniques usually give lasting results in that difficult 20 per cent of cases with bi-crural otosclerosis.

When the entire footplate of the stapes is replaced by otosclerosis, unless the otosclerotic area is very thin, there is little chance for a lasting successful restoration of hearing with a total stapes mobilization. Therefore, in this complete footplate otosclerosis, a new window window must be made into the inner ear (Fig. 4). This new window may be made by



removing the footplate of the stapes and covering the oval window with a vein graft (Shea<sup>5</sup>). This is usually accompanied by the insertion of an artificial erus of polyethylene tubing. When there is mountainous otosclerosis, completely obliterating the oval window niche, the new window is made in the horizontal semi-circular canal (the classical, reliable and predictable fenestration operation).

#### FENESTRATION OPERATION

The fenestration operation remains the master surgical procedure for the restoration of hearing in conductive deafness. The fenestration operation is indicated in an inoperable stapes with a functioning round window and good inner ear function. The fenestration operation may be performed when stapes surgery has failed. The fenestration operation is indicated when the stapes is inoperable from extensive otosclerosis, previous stapes surgery,

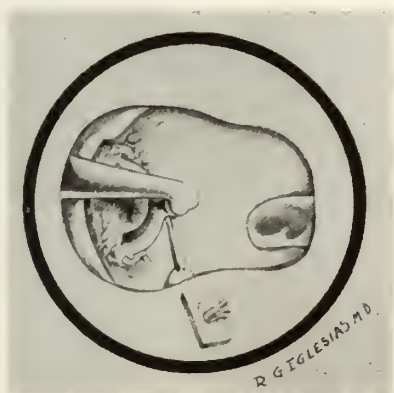


Fig. 4. When the entire stapedial footplate is replaced by thick, vascular otosclerosis, this is a pathological indication for the fenestration operation or the oval-window and vein graft.

or the fibrosis of previous infection. The fenestration operation is indicated whether this conductive deafness is the result of otosclerosis or chronic ear infection. Performed with microscopic perfection, the fenestration operation is the most reliable and predictable operation on the ear for the permanent restoration of a worthwhile hearing improvement.

#### Microscopic Diagnosis

Today, with microscopically accurate diagnosis of the surgical pathology of the stapes, the otologist can plan a variable surgical attack on the stapes, oval window, or horizontal

canal, which has an every increasing possibility of giving a lasting restoration of hearing.

## PART II TYMPANOPLASTIES

### Introduction

The hole in the ear drum remained open from the time of the caveman until the 1950s. Only in the past few years have we mastered the microscopically accurate surgical technique which permits the reconstruction of a new ear drum with the patient's own skin. These new ear drums seal the middle ear from outside infection and can frequently restore hearing to the near-normal level. Through plastic surgery of the ear drum, these patients can be permitted to swim without the fear of starting a dangerous mastoid infection.

While the American surgeons were busy restoring hearing through the fenestration operation and the variable stapes operations, the European surgeons,<sup>7, 8</sup> developed and standardized the types of tympanoplasties for the closure of the perforation in the ear drum in chronic ear infections. This plastic surgery was inspired undoubtedly by the great numbers of chronic ear infections which resulted from inadequate therapy in Europe during the war years.

The purpose of all tympanoplasties is, first, to reconstruct a new ear drum with the patient's own skin and, secondly, to improve the transmission of sound to the inner ear by utilizing all or any part of the remaining chain of auditory ossicles and protecting the round window. Depending upon the amount of air-containing space in the middle ear and the part of the ossicular chain utilized, tympanoplasties are divided into a basic classification of five types: myringoplasty, tympano-incudoplasty, tympano-stapedio-plasty, hypo-tympanoplasty, and the fenestration.

For the remainder of your lifetime, you will hear these operations referred to as Type I, II, III, IV and V; therefore, you will be interested in a brief definition of the basic types of tympanoplasty.

Type I—Myringoplasty: The myringoplasty is the closure of the perforation in the ear drum, utilizing the complete, freely movable, ossicular chain (malleus, incus and stapes).

The myringoplasty, Type I, is the most gratifying of all the tympanoplastic procedures for most frequently the hearing will be returned to the normal or near-normal level and the patient has a new, near-normal ear drum.

**Type II—Tympano-incudo-plasty:** When the joint between the incus and malleus has been destroyed by the chronic disease process, the new ear drum (skin graft) omits the use of the malleus and is attached directly to the incus. As the incus is frequently destroyed by the disease, the surgeon rarely finds an opportunity to utilize the tympano-incudo-plasty, but when the proper pathological circumstances are found, the tympanoplasty, Type II, tympano-incudo-plasty, can restore the hearing to the near-normal level.

**Type III—Tympano-stapedio-plasty:** When the malleus and incus have been destroyed by the disease process, the new ear drum (skin graft) is brought into contact with the remaining stapes. The tympano-stapedio-plasty, tympanoplasty Type III, will restore the hearing to the near-normal level and is one of the more useful and frequently employed types of tympanoplasties.

Sometimes the crura of the stapes have also been destroyed by the disease process. Under these circumstances, it is frequently possible to utilize a remaining portion of the incus or malleus to cover the footplate of the stapes, simulating new crura. This ossicular repositioning to simulate the legs of the stapes is classified as tympanoplasty Type III-B, and will usually give better results than Type IV tympanoplasty, where there are no legs on the stapes.

**Type IV—Hypo-tympanoplasty:** When the disease process has destroyed the malleus, the incus, and the crura of the stapes, the new ear drum (skin graft) can be utilized to cover and protect the round window. This creates an air space in the hypo-tympanum from the eustachian tube to the round window. In the severely handicapped, this will give a partial hearing improvement but where possible every effort should be made to perform a Type III or III-B, a tympano-stapedio-plasty.

**Type V—Fenestration of the horizontal canal:** When the disease process has destroyed the malleus, incus and crura of the stapes and

filled the oval window with irremovable scar tissue, and when the round window is normal, a new oval window can be made in the horizontal semi-circular canal, the classical fenestra-



*Fig. 5. The hole in the ear drum remained open from the time of the caveman until the 1950's. With microscopically accurate plastic technique, a new ear drum can now be reconstructed with a free skin graft. The type of tympanoplasty utilized is dependent upon the remaining portion of the auditory ossicles—the malleus, incus and stapes.*

stration operation. With the new ear drum covering the hypo-tympanum, and extending upward over the round window and fenestra, the hearing can be restored to the 30 decibel level. This enables the patient to understand most conversations at 10 to 15 feet. The Type V tympanoplasty (fenestration) is rarely performed as a primary procedure, but is usually performed as a secondary procedure when Type III or Type IV have failed to produce a satisfactory hearing improvement yet the eustachian tube, the round window and hypo-tympanum are functional.

Do not let all of these terms confuse you, all you need to remember is the myringoplasty and the tympano-stapedio-plasty, (Type I and III). These are the types most frequently employed and, where applicable, these are the types which will give your patients the best hearing improvement.

#### *Mastoid Infection*

Many perforations in the ear drum are associated with chronic infections of the eustachian tube, middle ear and mastoid. The infection, or cholesteatoma, must be treated or operated upon before a successful result can be obtained through a tympanoplasty. Therefore, a modified radical mastoidectomy (Fig. 6), or an at-



ticotomy, is frequently combined with any of the above types of tympanoplasty either in a one-stage or a two-stage operation. These combined mastoidectomies and tympanoplasties are among the most difficult and tedious of all surgical procedures on the ear.



Fig. 6. Perforations in the ear drum are frequently associated with chronic mastoid disease; this requires a combined mastoidectomy and tympanoplasty. In the above illustration, the sac of a cholesteatoma has destroyed part of the incus and dissected under the incus to fill the mastoid antrum. This normal stapes and the mastoid disease are an indication for a modified radical mastoidectomy and a tympano-stapedioplasty.

Chronic infection in the eustachian tube and adjacent hypo-tympanum is one of the great causes for failure in tympanoplasty; therefore, the otologist must be on the continuous alert for the detection and treatment of eustachian tube and middle ear disease.

### CONDUCTIVE DEAFNESS

The modern operations are designed to improve the hearing in conductive deafness where the inner ear is good but the sound does not reach the organ of Corti. To determine the opportunity for improvement, pre-operatively the inner ear is tested by the bone conduction. In your office, you can test the bone conduction by placing a tuning fork on the mastoid. Characteristically the patient hears better by bone conduction than by air conduction. The same test may be simulated by placing a loud watch on the mastoid. Your otologist will use the bone conduction oscillator of the calibrated audiometer. With this method, the inner ear function is carefully measured and the possible good results of surgery may be accurately predicted.

Characteristically patients with conductive

deafness can understand clearly if the sound is loud enough to reach the organ of Corti. In your office, if you will talk loudly, directly into the patient's ear, and you are clearly understood, the possibilities are that your patient can be helped through ear surgery. If the loud voice annoys the patient, or remains indistinct, then surgical benefits are doubtful. With the audiometer, the speech discrimination is measured and the possible results of surgery may be predicted more accurately.

#### *Preoperative Testing*

The possible restoration of hearing from tympanoplasty can be predicted and anticipated, by inserting an artificial drum, by testing the mobility of the ossicular chain with an acoustic probe or by sound protection of the round window.

*The artificial ear drum:* As an office procedure an artificial ear drum can be inserted to close temporarily a perforation of the ear drum to determine the anticipated restoration of hearing through a tympanoplasty. If the ossicular chain, (the malleus, incus and stapes) is freely movable, the patient will experience a dramatic hearing improvement. A tympanoplasty should produce the same hearing improvement as the artificial drum.

*Acoustic probe:* As an office or operating room procedure, the mobility of the ossicular chain, (malleus, incus and stapes) may be determined with an acoustic probe attached to an audiometer or a tuning fork. The purpose of the acoustic probe is to compare the bone conduction of the promontory of the cochlea with that of the malleus, the incus, and the stapes. If the bone conduction is best at some point on the ossicular chain, then there is a good possibility of hearing improvement through the appropriate type of tympanoplasty. This testing, along the ossicular chain, helps to determine the indicated type of tympanoplasty, I, II, III, IV or V.

*Round window protection:* In very large perforations the sound waves reach the oval and round window at the same time and, therefore, do not adequately stimulate the organ of Corti. The hearing can sometimes be improved by protecting the round window with an ointment or cotton. This possible improvement helps to evaluate the possible



permanent restoration of hearing with the appropriate tympanoplasty. The sound protection of the round window is one of the basic principles of all middle ear surgery.

### ACUTE PERFORATIONS

Acute perforations of the ear drum usually heal spontaneously or with office treatment. This is usually true whether the perforation is the result of an acute otitis media, blast injuries, traumatic injuries, or water injuries from skiing. The general exception to this rule is the anterior-inferior perforation which is produced by slag injuries in metal workers—these slag perforations frequently require a myringoplasty.

When a patient with an acute perforation comes into your office, the important thing to remember is not to put drops in the ear, for this will frequently introduce infection into the middle ear, produce mastoiditis, and complicate the disease. If infection has been introduced into the middle ear, as in all water-ski perforations, the patient should be placed on large doses of antibiotics until all inflammatory reaction subsides.

#### *The History*

In otosclerotic deafness, characteristically there is a gradual loss of hearing beginning in adolescence or early adult life. Rarely does otosclerotic deafness begin in childhood or after the age of fifty.

In perforations of the ear drum, there is usually a childhood history of otorrhea or recurrent otitis media. In perforated ear drums, the best results are obtained when the infection has not destroyed the chain of auditory ossicles, the malleus, incus and stapes.

#### *Summary*

1. Under the operating microscope, the surgical pathology of the middle ear becomes significantly more variable than the pathology of any cavity in the entire body.

2. For the surgical restoration of hearing, the otologist has seven types of stapes operations—five types of tympanoplasties, and the fenestration operation.

3. The newer types of stapes operations are designed to by-pass the otosclerotic area and work through a normal stapedial footplate, and thereby to improve the percentage with lasting successful restoration of hearing.

4. The operations upon the stapes are: Total stapes mobilization (direct or indirect), anterior crurotomy, posterior crural repositioning, artificial cruralization, and the oval window window and vein graft.

5. The types of tympanoplasties are: The myringoplasty, tympano-incudo-plasty, tympano-stapedio-plasty, hypo-tympano-plasty, and the fenestration. The indication for each type is dependent upon the remaining portions of the auditory ossicles—the malleus, incus, and stapes.

6. Profound surgical judgment is required for the otologist to evaluate these microscopic variations in the surgical pathology and to apply the appropriate surgical technique to obtain the maximum restoration of hearing through the tremendous surgical armamentarium of the modern otologist.

7. The fenestration operation remains the master surgical procedure for the restoration of hearing in conductive deafness. It is indicated when the stapes is inoperable, the round window is functional, and there is a good inner ear.

8. In stapes mobilization failures, a good result can frequently be obtained by the use of artificial crura or by fenestration of the oval window and a vein graft.

#### REFERENCES

1. Lempert, J.: Fenestra nov-ovalis; a new oval window for the improvement of hearing in cases of otosclerosis. *A.M.A. Arch. Otolaryng.* 34:880, 1941.
2. Rosen, S.: Mobilization of the stapes to restore hearing in otosclerosis. *New York J. Med.* 53:2650, 1953.
3. Basek, M. and Fowler, E. P., Jr.: Anatomical factors in stapes-mobilization operations. *A.M.A. Arch. Otolaryng.* 63:589, 1956.
4. Farrior, J. B.: Crural repositioning in stapes mobilization surgery. To be published in *Laryngoscope*, 1959.
5. Schuknecht, H. F. et al.: Results with the chisels in stapes mobilization. *Laryngoscope* 68:726, 1958.
6. Shea, J. J., Jr.: Fenestration of the oval window. *Ann. Otol. Rhin. & Laryng.* 67:932, 1958.
7. Wullstein, H.: The restoration of the function of the middle ear, in chronic otitis media. *Ann. Otol. Rhin. & Laryng.* 65:1020, 1956.
8. Zollner, F.: Surgical techniques for the improvement of sound conduction after radical operation. *Arch. ital. otol.* 64:455, 1953.
9. Farrior, J. B.: Stapes operability—pathological indications for mobilization and fenestration surgery. *Laryngoscope* 68:947, 1958.
10. Farrior, J. B.: Stapes operations; specific pathological indications for the variable surgical techniques: presented Northwestern University Workshop on Reconstructive Middle Ear Surgery, Chicago, Ill., March 17, 1959. To be published.

# CARDIAC RESUSCITATION

## A REVIEW AND REVISION

W. H. LEE, JR., M. D.\* AND J. M. STALLWORTH, M. D.\*

Any physician engaged in the active practice of clinical medicine may at some time during the course of his career be suddenly presented with the problem of treatment of the catastrophic cardiovascular syndrome of "cardiac arrest". Such a situation will undoubtedly present itself numerous times to those practitioners engaged in surgical careers. While the practicing surgeon is obliged to familiarize himself with the current methods utilized in the emergency resuscitation of the heart, it is advisable that all physicians take note of this ever increasing problem.

Cardiac arrest is defined as a sudden cessation of effective circulation, necessitating manual systole, or electro-shock, or both (with or without drug therapy) in order to re-establish an effective circulation.<sup>1</sup>

The actual incidence of cardiac arrest in the operating room is reported by most authors as being in the range of one in three thousand operations. This may be further sub-divided as one in one thousand cases involving old or poor risk cases.<sup>1</sup> These figures are approximately the same for both England and the United States, but are probably somewhat less than the true incidence due either to failure on the part of physicians to report their cases, or failure to make correct diagnoses as to the cause of sudden death. Hosler<sup>2</sup> has observed that cardiac arrest will probably occur six to twelve times each year in any moderate sized general hospital. Milstein<sup>3</sup> reports that half of the anesthetic deaths which occurred in England during a recent period were due to cardiac arrest. The mortality rate in this group was 60 to 70 percent.

### *Etiology*

The etiology of cardiac arrest is divided into six major subgroups:

(1) The most important of these groups consists of any factors which produce hypoxia of either the heart or brain, such as airway ob-

struction, inadequate ventilation, pulmonary alveolar disease, bronchial disease, inadequacy of oxygen supply, inadequacy of circulating hemoglobin or red blood cells, hypotension from any cause, deficient blood volume, and coronary atherosclerosis.

(2) The second major group is broadly termed reflex stimulation. This term describes many types of myocardial arrest presumed to be related to vagal hyperactivity initiated on a reflex basis.<sup>4, 13</sup> These arrest problems occur especially during the intubation and extubation phases of anesthesia, and often occur during endoscopic procedures.

(3) This group is termed direct manipulation of the heart (operative or traumatic). This factor is encountered most frequently in patients who have pre-existent heart disease, especially those who undergo corrective cardiac surgery.

(4) This group consists specifically of those cases of ventricular fibrillation which occur as a result of rapid shifts of the CO<sub>2</sub> content or pH of the blood from the acidotic to the alkalotic ranges.<sup>5, 6</sup> This situation commonly occurs, for example, on the operating table, at the termination of a surgical procedure, when the anesthetist, in preparation for extubation, hyperventilates and hyperoxygenates the patient who has been allowed to become somewhat hypercapneic and minimally sub-oxygenated during a long surgical procedure.<sup>7</sup>

(5) This group consists of those cases of ventricular fibrillation which occur as a result of the phenomenon termed the "rebound adrenal response". Such situations occur as a result of the excessive production of intrinsically produced catechol amines, especially in patients who have been subjected to generalized hypoxia or sub-oxygenation in the presence of a rapid pH shift from the acidotic to the alkalotic range. The overcompensatory production of catechol amines by the adrenal gland, as a result of noxious stimulation, has been re-

\*From the Department of Surgery, Medical College of South Carolina, Charleston, South Carolina.



ported in the presence of a reduced cardiac output with hypotension, and during cardiopulmonary bypass procedures at reduced flow rates during "open heart" cardiac operations.<sup>8, 9</sup>

(6) Another explanation for the mechanism of ventricular fibrillation and cardiac arrest during surgical procedures has recently been advocated by Gordon and Jones.<sup>10</sup> These authors propose that the production of ventricular fibrillation is caused by explosive ionic imbalances acting on the myocardium. Specifically, the major ionic imbalance implicated in this experimental data is that of rapid extreme increases in potassium resulting from anoxia, hypercapnia, hemorrhage, etc., from endogenous source. These concepts have been supported by the findings of Goott et. al.,<sup>11</sup> who suggested that the etiological factors of ventricular fibrillation were primarily related to rapid critical ionic shifts, with the time and relative values of the ionic shifts being of far greater importance than the absolute values. Ashmore<sup>12</sup> and Gordon<sup>10</sup> have demonstrated also that small doses of potassium citrate injected into the coronary circulation in attempting to produce controlled cardioplegia most frequently results in ventricular fibrillation, whereas larger doses produce the desired cardiac arrest.

#### *Treatment*

Optimally, treatment should be carried out by a trained team maintained in hospitals, according to a previously planned course of action. This, of course, is usually impossible except in larger medical centers, therefore it becomes necessary for every physician to be cognizant of the general principles of treatment. Clinical and experimental investigators generally agree that the safe limit of cessation of cerebral circulation is in the range of four minutes.<sup>14, 15</sup> In the majority of cases, interruption of cerebral blood flow for longer periods results in more or less major degrees of permanent neurological injury. However, treatment should not necessarily be abandoned if more than four minutes of time has elapsed since the onset of cardiac arrest, in that numerous cases have been reported of successful resuscitation following periods of arrest longer than 10 minutes. In children, particu-

larly, the time limit should be extended beyond which a successful resuscitation may be generally expected.

Certain technical facilities are a prerequisite before the treatment of cardiac arrest may be initiated. Foremost among these is the availability of a method for the administration of positive pressure oxygen, after the establishment of a patent airway. Cardiac resuscitation cannot be effective without adequate positive pressure ventilation and re-oxygenation of the patient. In addition, a few basic surgical instruments are needed to perform the emergency thoracotomy. Obviously, an attempt at a cardiac resuscitation on the golf course or a downtown sidewalk is an unjustified and undesirable bit of medical melodrama. Nevertheless, when a diagnosis of cardiac arrest is clinically suspected, and the patient is potentially salvagable, and there is available a method of administering positive pressure oxygen, as well as a knife to open the chest, immediate left thoracotomy is indicated in order to definitely establish the diagnosis, and initiate treatment. Sudden and absolute absence of detectable blood pressure or pulse are the only diagnostic criteria necessary for thoracotomy in this instance.

While the recovery of all cases of cardiac arrest which occur in the operating room is in the range of 25 percent, the expected recovery of patients sustaining arrest outside of the operating room is probably less than half of this.<sup>16</sup> Beck, Hosler, and others have contributed substantially to the principles of the treatment of cardiac arrest by emphasizing the fact that treatment should be divided into two basic procedures. The first is the administration of oxygen by positive pressure, either by mask or endotracheal tube, with immediate thoracotomy and cardiac massage (manual systole). Johnson and Kirby<sup>17</sup> have stated that the heart should be massaged within 15 seconds after beginning the thoracic skin incision; however, care should be taken to avoid laceration of the heart or lung during this phase. The incision of choice is made transversely in the left fourth or fifth intercostal space. After the first two or three massages, the pericardium should be opened (avoiding the phrenic nerve) to render manual



systole more effective. Both clinically and experimentally a systolic blood pressure of 60-70 mm. of mercury can be easily maintained by effective cardiac massage. The surgeon should avoid using the thumb in compressing the heart whenever possible, since this has resulted in rupture of the anterior myocardial wall.<sup>2</sup> Ideally, the heart is massaged by compressing it between the two palms of both hands, or compressing the heart against the sternum with the palm of one hand, depending upon the size of the heart, the chest incision, and other technical factors. Some authors advise compressing the thoracic aorta (descending) in order to increase the blood flow to the myocardium and brain during the initial minutes of cardiac massage. However, thoracic aortic occlusion is definitely inadvisable for periods longer than 10 minutes because of the possibility of damage to the spinal cord and adrenals.<sup>2</sup>

Massage should continue at a rate of 60 to 80 beats per minute, for at least 10 to 20 minutes while deciding on further therapeutic measures.<sup>19</sup> Many arrested hearts will restart after 6-12 effective manual systoles. Most hearts with good tonus will regain an effective beat within 20 minutes. Ventricular fibrillation and cardiac asystole may usually be differentiated by inspection and palpation. However, during the 10 to 20 minutes of manual systole before other therapeutic measures are initiated, the exact nature of the cardiac arrest should be confirmed by electrocardiographic tracings. The first stage then of the treatment of cardiac arrest, is the initiation of an artificial circulation by means of cardiac massage, and positive pressure oxygen administration. The second part of the resuscitation procedure consists of the re-establishment of a spontaneous organized cardiac contractility. In many instances, spontaneous cardiac action will resume during the first phase of the resuscitation procedure. This is particularly true of those hearts which have arrested in a dilated asystolic phase. The heart which is fibrillating when the chest is opened is most apt to resist the measures of oxygenation and cardiac massage. The second stage of resuscitation may be then divided into treatment depending upon

the type of "arrest" which is present after the 15-20 minutes of effective massage.

A. Ventricular fibrillation. Electroschock therapy is considered to be the treatment of choice. The fibrillation may be of two types. If it is weak with tiny fibrillatory disorganized writhings, an initial shock may be attempted to re-initiate and organize cardiac rhythm. If this is unsuccessful, the fibrillation may be strengthened and coarsened by the injection of .5 ml. of a solution of 1:1000 epinephrine in 5 ml. of saline. This converted strong fibrillation is usually more susceptible to the electroshock methods which are described as follows:

The metal plates of the electrodes should be covered with moist sponges to prevent burns to the heart. For average treatment, the recommended voltages vary from 110 volts to 135 volts in one to three rapidly spaced contacts for durations varying from .1 to .5 seconds per shock. If the initial shock of 110 volts, administered twice in rapid succession at .1 second duration is unsuccessful, the next step should probably be a rapid series of 4-6 interrupted shocks of .1 second duration with voltage of 110 to 120. If this is unsuccessful, the voltage could be increased to around 135, and the duration to .5 seconds. The refractory periods of cardiac muscle is approximately .1 second. Therefore, extending the duration of shock over .5 seconds is not only unnecessary but undesirable, as heat generated by the electrical current may produce an irreversibly refractory state of the muscle fibers of the heart, rendering it non-susceptible to electroshock conversion. If the heart becomes refractory to electrical stimulation, the pericardial sac should be irrigated with cool saline solution, to reduce the temperature which has been produced by electroshock therapy. Massage of the heart should be continued between attempts at defibrillating the heart with electroshock. No effort should be made to defibrillate the heart until the myocardium and brain are re-oxygenated by a positive pressure administration of oxygen and cardiac massage for at least 5-10 minutes, preferably 10-20 minutes. Kirby and Johnson<sup>17</sup> have recommended 220 volts for .1 second for those cases refractory to the lesser voltage, but certainly this

higher voltage will result in a higher incidence of refractory muscle due to burning.

B. Cardiac standstill. If the heart is still in asystolic arrest at the end of the first phase of the cardiac resuscitation, one of the two methods of re-instituting a cardiac beat may then be attempted. The electrical pacemaker may be applied to the heart and a rhythmic beat initiated electronically. This has not been frequently successful in the hands of many investigators (including the authors). The other method of reinstituting a cardiac beat is the introduction of various chemicals into the left ventricle through its apex followed by massage which forces the solutions into the proximal aorta and thence into the coronary circulation. A number of different solutions have been recommended by different authors. A solution of .5 ml. of 1:1000 epinephrine in 5 ml. of saline, has probably been the most successful cardiac stimulant in the hands of most investigators. Kay and Blalock,<sup>18</sup> however, have reported that 2 ml of 10% calcium chloride solution has been as successful, clinically, as epinephrine in the stimulation of the cardiac beat. Calcium chloride specifically stimulates heart tone and frequently converts a flabby, dilated heart into one with good muscular tonus which may be more susceptible to other stimulation. Shannon<sup>29</sup> and others have recommended the intracardiac injection of 1 ml. Levophed (= 1 mg. base) (levarteronol bitartrate) for stimulation of the arrested myocardium. Nathanson and Miller<sup>20</sup> and the authors have successfully used .02 mg. of Isuprel (isoproterenol HCl) injected directly into the left ventricle. Pronestyl (procainamide HCl) or procaine hydrochloride have been used successfully to diminish cardiac irritability in the cases of ventricular fibrillation, resulting usually in cardiac standstill and then the re-initiation of a spontaneous cardiac rhythm by massage or by further drug therapy. Occasionally, this procedure alone may completely revert the fibrillation to an organized rhythm.\* The authors have found a successful routine in some cases of ventricular fibrillation during or just after cardiopulmonary bypass to consist of injection of 1 to 4 ampules of

Regitine hydrochloride, (phentolamine HCl) followed by the administration of 100 to 400 mg. of Pronestyl, (procainamide HCl) to produce cardiac standstill, then to stimulate the heart with either Isuprel or norepinephrine to initiate the beat. This procedure has been used particularly in cases of ventricular fibrillation occurring during the process of cardiopulmonary bypass at perfusion flow rates which result in acidosis and "rebound" sympatho-adrenal activity.<sup>8, 21-23</sup> If the heart, which is in standstill in cardiac arrest, does not respond to the injection of Levophed or epinephrine, the refractoriness may be due to a marked acidosis secondary to ischemia.<sup>24-26</sup> If the heart is not in ventricular fibrillation, and there is no response to the injection of Levophed or epinephrine, a solution of sodium bicarbonate may be given in an attempt to convert the acidosis to a relative alkalosis and thus regain the susceptibility of the cardiovascular vasopressor and cardiac contractility mechanism to the catechol amine stimulation.<sup>24, 25, 27</sup> This may result in ventricular fibrillation, which can usually be converted by electroshock therapy. Silverman and Eichart<sup>28</sup> have reported stimulating the myocardium with molar sodium lactate, but later studies<sup>27</sup> have indicated bicarbonate to be the better drug.

Efforts to resuscitate the heart should probably be continued as long as 60 to 80 minutes since successful resuscitations have been reported after several hours of massage. Each case must be decided on the basis of the probable brain damage, the elapsed time before massage, pupillary signs, and the general salvagability of the patient. In general, after the heart has been re-started, the patient should be observed for 20-30 minutes with the chest open. If the cardiac rhythm appears to be stable at that time, the chest should be closed in the operating room, observing the usual precautions of sterility and hemostasis. Attention should be directed to blood transfusions, electrolyte imbalance correction, digitalization, the administration of antibiotics, and other general supportive measures. If the patient remains comatose after 12 hours, a tracheostomy should be done prophylactically. The onset of cerebral edema within 24 hours, (usually 10-18 hours after cardiac resuscita-

\*One case by one of the authors (J. M. S.)



tion) should be carefully observed. Death associated with convulsions is the most frequent result of cerebral edema due to cardiac arrest. The treatment of this complication consists of the administration of salt poor serum albumin, Diamox (acetazolamide) or 30% urea solution, fluid restriction, and other general measures in the treatment of cerebral edema.

### Summary

The survival rate of patients having been resuscitated from cardiac arrest and ventricular fibrillation is about 25 per cent. In view of the increased recognition of this catastrophe both by the lay public as well as the physicians, it has become essential for all hospitals to be prepared for this emergency and for all physicians to be familiar with the techniques of cardiac resuscitation.

Of the many causes for cardiac arrest, myocardial hypoxia is, by far, the chief offender. Accordingly, an adequate oxygen supply and an ample hemoglobin stock are as necessary in the prevention as in the treatment of this disorder. Resuscitation will universally fail in the presence of anoxia or anemia.

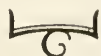
The treatment of cardiac arrest is the correction of the cause of anoxia, initiation of cardiac massage immediately, replacement of blood when necessary, and maintenance of cardiac massage until a specific cause can be demonstrated or until the patient shows signs (as dilated pupils) of irreparable brain damage. In many instances, manual systole in the presence of adequate oxygen intake is sufficient to restore normal heart rhythm. In the remaining cases, chemical myocardial stimulants such as epinephrine, nor-epinephrine, calcium chloride, and Isuprel may be used for the flabby depressed hearts, or depressants such as novocaine may be needed for the irritable myocardium. These chemicals may be employed in the absence of or in conjunction with the electrical defibrillator and stimulator.

It is necessary to be more than conversant with these resuscitative measures. If these patients are to be revived, every physician must

be able to make an early diagnosis of cardiac rhythm failure and to apply logical resuscitation methods according to the cause of the difficulty at hand.

### REFERENCES

1. Keeley, J. L., Schairer, A. E., and Carrol, J. P.: *S. Clin. North America*, p. 55, Feb. 1958.
2. Hosler, R. M.: *A.M.A. Arch. Surg.* 73:813, 1956.
3. Milstein, B. B.: *Ann. Roy. Coll. Surgeons England* 19:69, 1956.
4. Stewart, B. D., Virtue, R. W., and Swan, H.: *A.M.A. Arch. Surg.* 66:703, 1953.
5. Brown, E. B., Jr., and Miller, F.: *Am. J. Physiol.* 169:56, 1952.
6. Sealy, W. C., Young, W. G., Jr., and Harris, J. S.: *J. Thoracic Surg.* 28:447, 1954.
7. Gordon, A. S., Andrews, P. W., Adrian, F. E., and Beattie, E. J., Jr.: *S. Forum* 8:306, 1957.
8. Woods, E. F., Richardson, J. A., Lee, W. H., Jr., Ashmore, J. D., and Parker, E. F.: *Circulation* 16:955, 1957.
9. Darby, T. D., and Woods, E. F.: Unpublished data, personal communication.
10. Gordon, A. S., and Jones, J. C.: Thirty-ninth Annual Meeting of Am. A. for Thoracic Surg. April, 1959 (In press).
11. Goott, B., Miller, F. A., and Wangenstein, O. H.: Thirty-ninth Annual Meeting of Am. A. for Thoracic Surg., April, 1959 (In press).
12. Ashmore, J. D., Parker, E. F., Lee, W. H., Jr., and Brown, L. L.: *J. South Carolina M. A.* 53:458, 1957).
13. Sloan, H. E.: *Surg.-Gynec. & Obst.* 91:257, 1950.
14. Weinberger, L. W., Gibbon, M. H., Gibbon, J. H., Jr.: *Arch. Neurol. & Psychiat.* 43:615, 1940.
15. Cooley, D. A.: *Ann. Surg.* 132:930, 1950.
16. Stephenson, H. E., Jr., and Hinton, J. W.: *J.A.M.A.* 152:500, 1953.
17. Johnson, J., and Kirby, C. K.: *Am. Pract. & Digest Treat.* 5:264, 1954.
18. Kay, J. H., and Blalock, A.: *Surg. Gynec. & Obst.* 93:97, 1951.
19. Wylic, W. D.: *Brit. J. Anaesth.* 28:551, 1956.
20. Nathanson, M. H., and Millar, H.: *Circulation* 6:238, 1952.
21. Lee, W. H., Jr., Darby, T. D., Ashmore, J. D., and Parker, E. F.: *S. Forum* 8:398, 1957.
22. Lee, W. H., Jr., Darby, T. D., Woods, E. F., Ashmore, J. D., Richardson, J. A., and Parker, E. F.: *Circulation* 16:962, 1957.
23. Darby, T. D., Parker, E. F., Lee, W. H., Jr., and Ashmore, J. D.: *Ann. Surg.* 147:596, 1958.
24. Darby, T. D., Aldinger, E. A., Lee, W. H., Jr., and Tenney, J. M.: *Feb. Proc.* 17:362, 1958.
25. Lee, W. H., Jr., Stallworth, J. M., and Tenney, J. M.: In press.
26. Weil, M. H., Honle, D. B., Brown, E. B., Jr., and Campbell, G. S.: Am. Heart A. Thirtieth Scientific Sessions, Oct. 1957.
27. Magovern, G. J., Cartwright, R. S., Neville, J. F., and Kent, E. M.: Thirty-ninth Annual Meeting of the Am. A. for Thoracic Surg. (In press).
28. Silverman, L. M., and Eichert, H.: *J.A.M.A.* 164:1209, 1957.
29. Shannon, F. A. and Henry, W. N.: *Arizona Med.* 11:250, 1954.





# THE GREENVILLE COUNTY MEDICAL SOCIETY

## HISTORICAL SKETCHES

### 4. MEDICAL GREATS

J. DECHERD GUESS, M. D.

This is the fourth of a series of articles, adapted from the book *A Medical History of Greenville, South Carolina*, written by the same author, and which will be published by the Greenville County Medical Society in 1959.

There was a relatively small group of doctors who played gigantic roles on the stage of Greenville's medical history. These men varied in their talents and in the scope of their activities. Nevertheless they were great men, and they were great doctors. Because of unusual health and unusual longevity, they continued their activities well beyond the usual life's span, and most of them lived until near the middle of the twentieth century.

They continued to be substantial citizens and to be held in high esteem as doctors by the community up almost to the time of their deaths.

The first of these unusual men was Dr. Davis Furman who was born in 1858 and died in 1931 at the age of 73.

Dr. Furman studied medicine at the Medical College of Louisville and received his M. D. degree from the University of Maryland. He practiced for short periods of time in Leadville, Missouri, then somewhere in Tennessee, then in Pelzer, S. C., and finally in Westminster before he came to Greenville in 1891. It has been said that a rolling stone gathers no moss. If moss is synonymous with wealth, Dr. Furman was no exception to the rule. However, as he moved from location to location, he acquired maturity, and experience, and a personality which made of him a great family doctor as was evidenced by the large practice he had soon built up in Greenville. His practice was largely for the better educated and more elite people of the community. Many of them remained his patients and his loyal friends up until the day of his death. It was written of him after his death that "He

was not only the ideal family doctor, but he was the perfect family friend. He may have been called in as a physician, but before he left, somehow you had the feeling that you were richer by another friend. He had the rare gift of making himself a real part of every family circle he treated."

Dr. Furman's contribution to the medical history of Greenville was more than that of a popular and skillful family doctor. He took an active and astute interest in public health before public health was a recognized part of medical service. The city board of health was organized in 1888. Dr. Furman was its chairman from 1911 to 1925. He was influential in establishing a county board of health. This was done in 1916. Later Dr. Furman was a member of the State Board of Health. In and before 1910, pellagra was a scourge in the Piedmont. Dr. Furman became greatly interested in the disease, and he became a widely recognized authority on its diagnosis and treatment, long before its relationship to vitamin deficiency was recognized.

A facet of his interest in public health, and no doubt an outgrowth of his observation of the hazards of an impure water supply, was Dr. Furman's insistent advocacy of a pure water supply for Greenville. It was largely because of his scientific leadership and his ability to secure the cooperation of business and industrial leaders that the Table Rock watershed was purchased and an adequate and uncontaminated water supply was assured for the city.

In 1905-1906, Dr. Furman was president of the South Carolina Medical Association. He had consistently shown an active interest in both the scientific and other work of the Association during the preceding year, the first year after its reorganization. He succeeded Dr. Robert Wilson, *The Journal of the State*

Association began publication in June after his election to the presidency. Dr. Wilson had been chosen to be its editor. Dr. J. W. Jervey was councilor of the Fourth Medical District that year.

This was a momentous year for South Carolina medicine. Dr. Robert Wilson in his presidential address the year before had referred to the new constitution which had been adopted. Referring to the new constitution of the American Medical Association, he said that the "South Carolina Medical Association had entered into league with other state associations to form the national organization." He continued, "The county society was the unit of the State Association, which was a federation of county societies, and no doctor could be a member of the State Association except through membership in his county society."

Referring to county society meetings, Dr. Wilson insisted upon monthly meetings and said, "Whatever else is done (in the county society meetings), a paper should be read at every meeting and discussion encouraged . . . It may be instructive and stimulating to hear a well written article, or to listen to a critical discussion, but it is vastly more beneficial to do the writing and the discussing yourself."

No doubt Dr. Furman felt the same way. He had a paper in the first number of *The Journal*. His subject was "Cerebral Spinal Meningitis and Hydrophobia."

The Greenville County Society was not included in the roster of members of the State Association until November, 1905. This was several months after Dr. Furman's election to the presidency of the State Association. There were at that time thirty members of the county society.

The Fourth District Medical Society was organized by Dr. Jervey in February, 1906. Sixty doctors were present.

At the annual meeting of the Greenville County Society in January, 1906, Dr. C. C. Jones was elected president, and Dr. C. T. J. Giles was made vice-president. J. Adams Hayne was elected secretary. Dr. Hayne read a paper on diphtheria. Twenty members were present at this meeting.

The March issue of *The Journal* contained two papers by Greenville doctors. Dr. E. W.

Carpenter had a paper on, "The Modern Mastoid Operation," and Dr. Curran Earle had one on, "A Case of Contracted Pelvis Relieved (sic) by Caesarean." Later in the year, Dr. Carpenter published a paper in *The Journal* on "Headache Cause and Cure." Dr. Curran Earle published one on "Should There Be a Division of Fees," Dr. Furman wrote a paper on "Observations on Hydrophobia," and Dr. J. Adams Hayne published one on the "Pathology and Therapy of Gall Stones."

After his death, it was written of Dr. Furman in one of Greenville's papers: "Dr. Furman was not only a physician of unusual ability. He was in addition a citizen who evidenced in remarkable degree a most active interest in public affairs of this community, and whose activities, particularly in connection with matters concerning the public health, have been very fruitful in bringing into existence public policies that have been of great benefit to Greenville and the surrounding area."

Dr. H. B. Stewart had an unusually long and active life. He was born in 1855 and died in 1947. He received the M. D. degree in 1879 from the old Atlanta Medical College. After graduation he located in the Fairview community in the lower part of Greenville County, where he remained all of his life. It was one of his boasts—he had several—that he was a horseback doctor for 25 years; a horse and buggy doctor for 12 years; and a contender with the temperamental early automobile until it had ceased to be so. He claimed to have conducted over 4,000 obstetric deliveries, with the birth of two sets of triplets and ten sets of twins, all without a maternal death *during labor*. He prided himself on having never requested the payment of a fee. He claimed to be the servant of the people of his community.

In a sense, he erected his own monument, when he erected in the Fairview Church cemetery a monument to the family physician. On the north side of the monument he had inscribed the words, "Dedicated to the memory of the Family Physician"; on the south side, "In memory of those who keep the Home Fires burning while the doctor is away on his missions of mercy"; on the east side is a hand holding a typical medicine satchel; and on the

west side are the words, "Donated by H. B. Stewart, M. D., A. D. 1929."

Dr. C. T. J. Giles lived and practiced until he was 77 years of age, but he did not outlive his usefulness. He was born in 1869 and died in 1945. He graduated from the Medical College of the University of Georgia. He was a charter member of the Greenville County Medical Society and was its vice-president in 1906.

Dr. Giles was brusque in speech and manner. However, up nearly to the time of his death, he continued to serve a large group of loyal patients in the textile and interlying communities. He had a remarkably keen insight into the personalities of his patients and excellent medical judgment. Many was the time that he put a younger and better trained doctor (the writer included) to shame by the correctness of his diagnosis and the good outcome of his treatment.

It was said of him after his death: "Forty-three years of hard work in one community, without thought of self, days and nights without adequate sleep and rest; hard self-sacrificing work, that all classes of humanity might live, always doing his best as he knew it; clean in his habits, honest in his dealings with his fellowmen, he was respected and loved by all."

Dr. Joseph B. Earle was, perhaps, the leading family doctor in Greenville at the turn of the century. He was the son of a Christian minister, and he retained the interest he had inherited, perhaps, in the work of the church. He was a gentle, skillful, kindly, Christian gentleman and doctor.

Dr. Earle came to Greenville from Gowansville in Spartanburg County in 1862. He graduated in medicine from the University of Virginia in 1886. He retired from practice in 1915 because of impaired health. However he lived until 1941.

After retirement, Dr. Earle spent the summers at Caesar's Head where he lived in the old Caesar's Head Hotel. He acted as house physician at the hotel and was always available for emergency medical service when needed in the summer colony. Many Greenville people in those days either owned summer cottages on the Head or spent some vaca-

tion time at the hotel. It was a great comfort to these people to have available this kindly gentleman and physician should sudden illness occur.

A friend who knew him well wrote of him: "A winsome smile and ever practical approach in the sick room gained the composure of the sick. Dr. Earle's peer in the sick room has not appeared for he was cautious and faithful in handling his patients."

Dr. Earle was a member of the Furman University board of trustees for many years. He was interested always in the civic affairs of the community and his counsel and cooperation were sought after. An obituary written at the time of his death closed with these words: "The community of Greenville, whose people Dr. Earle loved and who loved him, bow in respect to his useful life and hold dear his memory."

Dr. Lawrence L. Richardson was another Greenville doctor whose life extended from the days of the Civil War until the midpoint of the twentieth century. He was born in 1866, and he died in 1958.

He graduated from the Atlanta Medical College in 1894. He used to say that he was a country doctor until he moved to Simpsonville in 1909. At one time he served as president of the County Medical Society. For 15 years he was chairman of the board of school trustees of Simpsonville. He was mayor of his town at the time of his death and he had been so for 41 successive years.

Only a few days before his death, he attended the regular meeting of the County Society. Strangely enough, as if he had a premonition of approaching death, he bade his colleagues good-bye in a gracious little speech.

In the November, 1956 issue of *The Bulletin*, the following tribute was printed. It was reprinted after his death in the September, 1958 number. The tribute was prepared by Dr. Hugh Smith, and it tells of Dr. Richardson, the man.

"A MAN'S CONTRIBUTION TO HIS COMMUNITY"

"When one has great respect and admiration for a man it seems fitting to acknowledge this fact. The medical profession can well be proud of this man's life and contributions to



his home community. Micah has said, 'you have been told, Oh man, what is good, and what the Lord requires of you; only to do justice, and to love kindness, and to walk humbly with your God!'

"On July 23, 1867, two years after the Civil War, the year the Suez Canal was opened, and that Lister published his 'Antiseptic Principle of Surgery,' a man was born in the lower part of Greenville County. His early life must have been difficult indeed when one recalls the economic history of that period. This man was the son of George W. and Louise Cox Richardson, native of that section, and he was one of several children born to that couple. He received his primary education in the local schools and went on to study medicine in the old Atlanta Medical College now a part of Emory University. He received the degree of Doctor of Medicine in 1894. He came back home and began active practice of medicine, which has now continued for more than 62 years. That he is active and beloved is fully appreciated by those of his colleagues who see him regularly at our County Medical Society meetings and from time to time in the halls of our local hospitals. Now in his 89th year his eyes have failed a bit, but not his vision. He is at work every day and many of his present patients are grandchildren of his earlier patients. He told me recently of delivering the daughter of a man he had ushered into the world some fifty years ago. In the sixty years of his practice he has delivered more than 6,400 babies and some of them within this last year. In the 62 years of his practice he has taken two vacations of two weeks each, one for his second honeymoon in 1913 and the other for a trip to Mexico some fourteen years ago. The only other time lost from his practice was due to surgery when his gall bladder was removed about seven years ago. He began in the horse and buggy days and for many years practiced on horseback. This was before the days of the telephone and electric lights. Even after he began driving automobiles, his love of good horses continued. He did not give up riding fine saddle horses until attacks of gall stone colic made it necessary when he was 80.

"In addition to a full and active practice

of medicine he has found time to serve his community in many other ways. He enjoys the most remarkable confidence of his townsmen and has served as the Mayor of Simpsonville for forty consecutive years. This may well be a record of its own. He has also served as a member of the School Board for thirty years, many of them as chairman. He is a life long member of the Baptist Church and has served as superintendent of its Sunday School for twenty years.

"This man has indeed devoted his life to Simpsonville and its community. The practice of medicine has been both his love and his labor. He is the only living charter member of the Greenville County Medical Society and has continued to be actively associated with it. He was president of our society about 1910 and became an honorary member a few years ago. It has been my privilege to know this great physician for more than thirty years. Never has one heard of his doing or saying an unkind thing. His ideals are high and his life truly merits the great tribute of Robert Louis Stevenson to a physician.

"Lawrence L. Richardson, M. D., gentleman, Christian, civic leader, physician and friend. He has given a full measure of service to his fellow man. May there be others like him."

Dr. Curran B. Earle was one of Greenville's two pioneer surgeons for about fifty years. He with his father, Dr. T. T. Earle, and a cousin, Dr. Joseph B. Earle, operated the first surgical hospital in Greenville. The hospital had 18 beds, and it was very well equipped to handle all types of surgery done in those days. When the city hospital was opened, the Earles closed their hospital, donated the equipment to the new hospital, and transferred their work there.

Dr. Earle was a charter fellow of the American College of Surgeons. He was a consistent and forceful proponent of the College pledge against the practice of fee splitting.

He served as a major in charge of surgery at the Army hospital at Camp Wadsworth in Spartanburg throughout World War I. This hospital was said to have had the lowest mortality rate of the several army hospitals in the country.

Dr. Earle served as president of the Green-

ville County Medical Society, and later he was president of the state Association.

He was a Lord Chesterfield in his manner and was very gracious. He prided himself, and justly so, in aiding in every way he could the young physicians who located in or near Greenville. Many a doctor now in his middle years can look back with gratitude to Dr. Earle's assistance at a time when he needed it badly. There are those also who can recall his caustic words when he had been offended—and he was sensitive and easily offended. Punctuality was almost an obsession with him. He used to quote to those colleagues less meticulous than, "Punctuality is the courtesy of Kings."

Dr. Earle graduated from the University of Maryland in 1896. He attended many short courses in surgery and many surgical meetings throughout his career. Like others of his day, he was a self-made surgeon and one who, like wine, improved with age, as opportunities to apply the results of his keen observations and his experience came to him.

Dr. Earle was a Rotarian and a past president of his club. He participated in many civic and business activities of the community. He was truly a civic minded doctor, a leading citizen of Greenville and a leading doctor of his state for half a century.

Dr. James Wilkinson Jervey was one of the last in South Carolina of a distinctive group of early American physicians. The members of this group who were found in the older cities of the Atlantic Seaboard were proud and aristocratic gentlemen, they were cultured scholars, and they were physicians. Dr. Jervey was typical of the group. A colleague might be the object of his biting sarcasm expressed, however, in cultured phrases; he might be a defeated opponent in debate; or he might be one of a group listening to the stories he could tell so well, and yet the colleague could not help but feel admiration for and be a little envious of the doctor because of his poise, his rapier-like repartee, and his ready wit. So it was that even though he was the object of grudging admiration, he was genuinely disliked by many a colleague. However, he had a host of devoted friends.

Dr. Jervey was born in 1874 into an old

Charleston family. His early education included attendance at the old Charleston High School, which was the prototype of the Latin Schools of New England. He graduated from the University of South Carolina. His medical degree, awarded in 1897, came from the Medical College of South Carolina.

He came to Greenville in 1898, and he limited his practice to ophthalmology and otolaryngology. He was Greenville's first eye, ear, nose and throat specialist. At various times, he studied in American and European clinics. He became a fellow of the American College of Surgeons and was a founding diplomate of the American Boards of Ophthalmology and of Otolaryngology.

Dr. Jervey was long a participant in the activities of organized medicine. Early in his career, and after the reorganization of the South Carolina Medical Association, he was appointed councilor of the newly formed Fourth Medical District. He was elected councilor the next year. He organized the Fourth District Medical Society in Greenville during his first year as councilor.

Dr. Jervey was president of the South Carolina Medical Association in 1912-1913. He was the second editor of *The Journal* of the South Carolina Medical Association, succeeding Dr. Robert Wilson who had launched the new venture with such affectionate care. He was president of the South Carolina Society of Ophthalmology and Otolaryngology in 1922-1923, and of the American Laryngological, Rhinological and Otological Society in 1933-1934. He served in the various offices of the Greenville County Society including its presidency. For many years before his death, he did not attend its meetings very regularly because, as he explained, he had become so hard of hearing. However, when after the death of Dr. Tyler, the second editor of *The Bulletin*, he was asked to assume the editorship, he very graciously consented to do so. His work as editor was one of love. As he so often said, he undertook to keep *The Bulletin* going because of the interest it would hold for the members away from home and in the armed forces. Under his editorship the character of *The Bulletin* changed considerably. It became less of a medical journal and more of a record-



ing of items of news interest to the absent members of the County Society. He relinquished the editorship after the end of the war and very shortly before his death.

Perhaps, the work in organized medicine which he enjoyed most and of which he was most proud was that in the Southern Medical Association. He served as chairman of his section, and he was councilor for many years. He was elected president in 1938, the year the Greenville County Society had begun a new progressive program. In the fall of that year, the County Society was asked by a number of Dr. Jervey's admirers throughout the state to arrange a banquet in his honor. This was done and in November, one hundred and eight doctors sat down with him to dinner. Seated at the head table were: Dr. James Des Portes, president of the State Association, Dr. Robert Wilson, dean of the Medical College, Dr. William Weston, of Columbia and a very active co-worker with Dr. Jervey in the Southern Medical Association, Dr. Jervey, Dr. Thomas Brockman, president of the Greenville Society, Dr. E. A. Hines, secretary of the State Association, Dr. Kenneth M. Lynch, the guest speaker for the scientific program which followed the testimonial dinner, Dr. W. S. Judy, the chairman of the committee on local arrangements, Dr. Will Fewell, and Dr. Mordecai Nachman, the secretary of the local society.

Drs. William Weston, Robert Wilson, Will Fewell, James Des Portes each eulogized Dr. Jervey in a warm and friendly manner. Dr. Jervey's speech, as he accepted a silver service which was presented to him by his friends to commemorate the event of his election to the presidency of the Southern Medical Association, was an attractive and feeling expression of appreciation of all that had been done and said in his honor.

The oratorical gem of the evening was the address made by Dr. Robert Wilson. It is worthy of reproduction. Dr. Wilson said:

"As our journey through life brings us toward the evening and the shadows lengthen and 'the long day wanes' it is pleasant to recall the friends who have traveled with us and shared the burden and the heat of the day. And so it is a pleasing privilege to be here tonight to speak well of one whose friendship I

have long enjoyed and whom I have learned to admire for his attainments and to love for his personality.

"In my early immature days of teaching at the medical school in Charleston it was my fortune to have Wilkie Jervey among my students, and since that time through the years that have followed our friendship has grown to ripe and mellow fruitage.

"I shall not speak of the many honors he has won by his professional knowledge and skill—others are more familiar than I with the story of his work and with his accomplishments in the technique of his art. Rather will I speak of the man I have known—the man who possesses a rare gift of speech, the outgrowth of a refined and cultivated mind; a facility of expression clear and sharp, often with a cutting edge, but controlled by his inborn gentility of feeling; a native wit and clarity of thought which combine to make his conversation and his writings entertaining and illuminating.

"In these days when our professional standards show signs of weakening, when the rank growth of commercialism threatens to strangle the fine flower of our time-honored ethical ideals, men like Wilkie Jervey are greatly needed—men who think clearly, speak boldly and act courageously in upholding the best traditions of the ancient art of medical practice, guarding against the decadence of ideals which destroys from within, and the unwarranted assaults which are becoming increasingly more threatening from without.

"A man of personal charm, with a keen intellect and a refined literary culture, who has learned to appreciate all that is beautiful in nature and in art, who seorns subterfuge and loathes deceit, who comprehends the moral, ethical, and scientific foundations upon which the security of medicine must depend in order to achieve its dual mission of humane service and the extension of the field of knowledge.

"Such is he whom we are here this evening to honor."

Dr. Jervey resigned as editor of *The Bulletin* and announced his retirement from practice late in 1945. He planned to spend considerable time in travel. However, like so many doctors and other busy people, he retired from active work too late to enjoy retire-



ment. He died, after a short illness, in the fall of that year.

Dr. Ernest Willoughby Carpenter was born in Charleston in 1874. He died in Greenville in 1942. He received his M. D. degree from the Medical College of South Carolina in 1895, and he did general practice in Charleston before he specialized in ophthalmology and otolaryngology. He studied in American and European centers.

In 1905 he came to Greenville and began his specialty practice. He became a charter diplomate of the American Board of Ophthalmology in 1921. He was a fellow of the American College of Surgeons and of the American Academy of Ophthalmology and Otolaryngology.

He and Dr. J. W. Jervey were contemporaries. They both came from Charleston. They were both very ambitious and they each developed a fine following in the local profession. It was inevitable that there should be enmity between them, and it was inevitable that Dr. Jervey, with his more aristocratic background, his rapier-like tongue, his eloquence of speech, and his ready ridicule, should appear to his friends to have the better of any argument. However, Dr. Carpenter was not without resource, and he was not without sympathizers and admirers.

Dr. Carpenter had a very large practice throughout his professional life. Perhaps, what is more noteworthy, was his willingness to go out into out of way places to assist a colleague with a desperate case. His life span included the era of diphtheria epidemics, with their incidence of membranous croup. Only intubation or tracheotomy could save these children who so rapidly choked to death. It was Doctor Carpenter who was called night or day by so many village and rural doctors to come and help try to save these little ones—and he always went, promptly, willingly, and cheerfully.

He was an unassuming but a good citizen, a good doctor, and a loyal friend.

Dr. Robert C. Bruce was born in 1877 and died in 1944. He graduated from The Citadel in 1896, and he received his M. D. degree from Vanderbilt in 1910. After graduation he began his practice in Greenville.

He held all of the offices in the Greenville

County Medical Society and became an honorary member of the society in 1936. He was the councilor for the Fourth Medical District for 10 years. He was elected president of the state Medical Association in 1936, after his nomination by his county society in a society caucus.

Dr. Bruce was a charter member of the staff of Greenville General Hospital and was a rotating chief of the medical service for many years. During World War I he served as chief medical examiner for the local draft board. He was chairman of the City Board of Health at the time of his death.

It was the writer's privilege to know Dr. Bruce well. To him, his chief characteristic was his unassuming gentleness and lack of guile. He was a sincere believer in the work of organized medicine, and he worked at it all of his professional life.

It was said of him after his death that, "Wherever he served, he became a 'trouble shooter!' He smoothed out many wrangles and unraveled many snarls, because he was so understanding, so sincere, so patient, and so wise."

Dr. T. R. W. Wilson was an import who added a very valuable cosmopolitan element to the medical community. He had been professor of pathology in the Baltimore Medical College, later the medical department of the University of Maryland, until 1908. In 1910 he visited Greenville and determined to move to the city. Before coming he took graduate work in radiology. He began his service in Greenville with the operation of an x-ray clinic and pathological laboratory. He operated this private institution only long enough to establish its worth to the community. Then he was induced to move the laboratory to the City Hospital. His work in Greenville was a constant stimulus to increased scientific medical practice. He was well read for his time. He was unassuming and non-irritating. His assistance was never offensive, and it was always generously given. It came to be requested frequently. In a very definite way, Dr. Wilson served as a one-man tissue committee on the hospital staff, and his influence tended to render more scientific medical practice in Greenville. He died in 1943.

This group of men were the greats of Greenville's medical fraternity for half a century. The element of their greatness varied from man to man. However, each of them made an

outstanding contribution to his profession and to his community, and each one at sometime in his career was looked upon as a farsighted and dedicated leader.

## MEDICAL COLLEGE CLINICS

### THE MEDICAL COLLEGE OF SOUTH CAROLINA

#### ELECTROCARDIOGRAM OF THE MONTH

##### The Retained Juvenile Pattern

DALE GROOM, M. D.  
Department of Medicine

*Case Record*—This is a routine preoperative electrocardiogram made on a 50 year old Negress who was admitted to the gynecology service for hysterectomy.

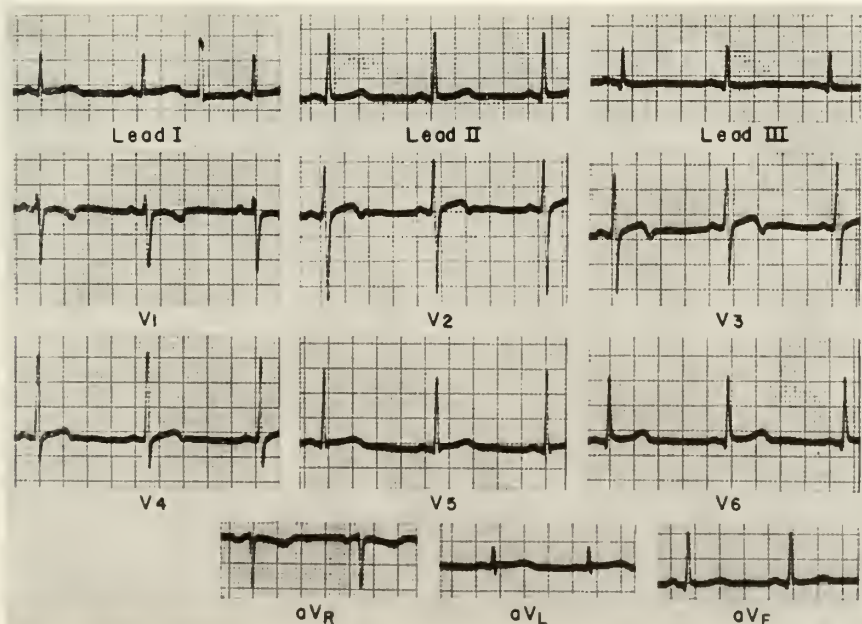
She had no history nor evidence of heart disease. Her cardiac shadow on chest roentgenograms was a little above average size but its contour was normal. There was a moderate hypochromic anemia.

*Electrocardiogram*—Except for T waves, this tracing is normal. They are somewhat low in amplitude throughout but are remarkably diphasic in  $V_2$  and  $V_3$ . To the left of the transition zone ( $V_3$ ) the T waves are entirely upright except for the last part of the wave in  $V_1$  which is isoelectric. Elevation of the S-T segments in  $V_3$  is minimal and of no significance.

The Q-T interval of 0.38 sec. is well within the normal range for the heart rate of 65.

*Discussion*—An unusual and probably normal anomaly of T waves is illustrated in this electrocardiogram of a presumably normal heart. Characteristically the T waves are inverted or diphasic in the right and mid-precordial leads with lesser alterations reflected in other leads. The peculiar diphasic deflection of the plus-minus type—first upright and then inverted—gives a distinctive appearance to the waves (though sometimes they are frankly inverted), and their localization to leads from the right side of the heart renders them all the more recognizable. The absence of any significant QRS or S-T abnormalities emphasizes the benign nature of what is generally interpreted as "the retained juvenile pattern" in the adult electrocardiogram.

Normally infants and children have a predominantly right ventricular type of electrocardiogram, ascribed to the dominant role of the right ventricle in the fetal circulation. Their tracings typically show a right axis deviation, high R waves in the right precordial leads,



and widespread inversion of T waves. This juvenile pattern ordinarily begins to wane at about age 3 or 4, giving way to the evolution of the normal adult electrocardiogram which is virtually complete by the time of adolescence. Apparently in some cases the evolution is retarded or actually arrested. Various gradations of T wave deformity of the childhood type are estimated to persist in 5 to 10% of normal Negro adults but in less than 1% of Caucasians. Whether these are truly vestiges of the juvenile pattern or not is controversial, but it should be emphasized that the similarity of these tracings to those of children is confined to the T waves and does not include the QRS changes of right ventricular preponderance of infants. Rarely, also, there may be minimal or moderate elevation of S-T segments<sup>1</sup> persisting in the left precordial leads, said to occur most frequently among Negro males, but this abnormality may or may not be associated with the T wave changes and its cause is obscure.

The possible role of vagotonia or some other functional disorder as a cause of so-called juvenile T

waves is suggested by the fact that hyperventilation accentuates the inversion in some cases. Moreover it has been shown that administration of potassium or of Pro-banthine Bromide (propantheline bromide) causes the T waves to become normally upright<sup>2</sup> even though the serum potassium level is not appreciably altered. Such observations point up the high degree of variability of T waves produced by many extracardiac factors.

Recognition of these T wave changes as a normal variant is of importance in differentiating them from the abnormalities of coronary, myocardial or pericardial disease.

#### REFERENCES

1. Gottschalk, C. W. and Craig, Ernest; A comparison of precordial S-T and T waves in the electrocardiograms of 600 healthy young negro and white adults. *Southern Med. J.*, (May, 1956.) 49:453.
2. Wasserburger, R. H.; Observations on the "Juvenile Pattern" of adult negro males. *Am. J. of Med.*, 18:429, March, 1955.

*Methods Used to Evaluate Vasodilator Drugs.* J. Manly Stallworth, M. D., William H. Lee, Jr., M. D., and J. Vernon Jeffords, M. D. *Angiology* 9:366-377, Dec., 1958.

Sixty-two patients were studied in an effort to determine the effects of vasodilators on their specific arterial diseases. The patients were classified arbitrarily into groups having vasospasm, mechanical obstruction, and Buerger's disease as the predominant clinical feature.

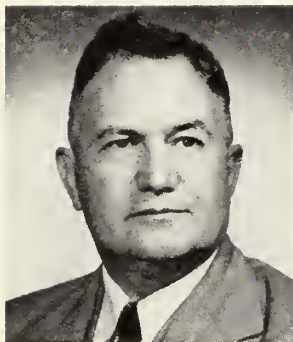
All patients were examined in a constant temperature-humidity room under basal metabolic conditions. The following observations were recorded before, during, and after vasodilator drug (azapetine) infusions: microscopic observations of the conjunctival

vessels (photographs made), digital plethysmographs, blood pressure, pulse, electrocardiograph, skin temperature of extremities, and oscillographs.

In general, the results indicated an excellent correlation between the digital arteries and the bulbar conjunctival arteries which, from a practical standpoint, indicate that observation of the reaction of the readily available conjunctival arteries to vasodilators offers a tangible and photographic means for evaluating these drugs.

There was a marked variation in individual response to the drug but, in general, the reaction was in direct ratio to the amount of vasospasm present no matter what the basic disease process may have been.





## PRESIDENT'S PAGE

### OBJECTIVES OF THE SOUTH CAROLINA MEDICAL ASSOCIATION

1. Improvement of the Health and well being of our Citizenry—It is good business to have good health as few cities, towns or communities enjoy one without the other. Consequently our public health measures are of the utmost importance, such as superior and ample water supply that has been properly treated so that it tastes good and not like some distasteful medicine. Proper sewerage disposal is a necessity, also good storm drainage. Pest and insect control is necessary, and the paving of streets and sidewalks are good health measures in my books, as well as proper street lighting with proper street crossings for pedestrians! We should be traffic conscious. Numerous trash containers and a minimum of noise are advised.
2. Immunizations of children and adults with known and proved vaccines. We have been giving diphtheria, pertussis and tetanus toxoids for many years which has proved successful in preventing these diseases. Now poliomyelitis is being added to the other three. Typhoid and paratyphoid vaccines have been injected for many years with great success, almost wiping out these diseases. Smallpox vaccination is the only one which is compulsory in our State to enter school. I trust it will remain this way, as I detest compulsion, but realize it must be done at times. Let's teach and educate our parents in the extreme importance of the preventive features in these diseases, and particularly at this time of poliomyelitis. A campaign, if you please, to strive to compensate and please all those individuals under 40 years to receive the polio vaccine so that this dread disease may in time also be wiped out. The only other vaccine which I would suggest the population taking at this time is the influenza vaccine; it is a good preventive.
3. Headquarters of the Executive Offices of the South Carolina Medical Association should be in the center of the state—population wise and geographically. The Legislature is in *per se* or through committees twelve months of the year, and a goodly part of our dealings is with this group; our contacts with the Governor, the Executive Branch, the Legislative group, the Judiciary, the State Board of Health are needed in the Capital City where they are situated, and it is surely where the South Carolina Medical Association Executive Offices should be located.
4. Proper care of the aged. Geriatrics is a field in medicine that we have helped create, so let's not shun our duties. Our Blue Cross and Blue Shield have presented a plan for this group. We must try to induce them to take advantage, else we are headed for Government Medicine in this respect, and once the wedge is driven there will be no escape. More of this subject in another article.
5. Revival of the Iodine and Research Program in South Carolina, on which an Editorial Page has already been published in the July issue of the Journal of the Association.
6. Continued support of the American Medical Education Foundation. You are contributing your funds for a most worthy cause . . . you are helping to educate future doctors through your donations. The medical colleges and schools need your assistance, so don't relax in this effort. South Carolina is proud of our contribution to our Medical College, and the Woman's Auxiliary has played an important role; it has been noble.

William Weston, Jr.

# Editorials

---

## FORAND BILL ONLY DORMANT

The U. S. Chamber of Commerce and two key Congressmen, all opponents of the so-called Forand bill, recently issued separate warnings that an all-out effort will be made to get the controversial legislation through Congress next year.

In its weekly report to members, the Chamber predicted there will be "a powerful attempt" in the next session of Congress to enact the bill (H.R. 4700) which would increase social security taxes to help pay for the cost of the Federal government providing surgical and hospital care for social security beneficiaries.

The Chamber warned that passage of the legislation would mark "a major break-through into the welfare state." It "probably would lead to a compulsory Federal program providing complete medical care for everyone," the Chamber said.

The Chamber called upon communities to find orderly solutions to the problems of the aging. Otherwise, solutions "will surely be imposed from Washington," the report added.

Similar warnings were voiced by Reps. Richard M. Simpson (R., Pa.) and Thomas B. Curtis (R., Mo.), key members of the House Ways and Means Committee where the bill was put on the shelf last session.

Rep. Curtis urged that the medical profession and other leading opponents make a strong counter-drive in an all-out effort to block passage of the bill next session. Unless there is such action, he said he would have to "regretfully" predict that legislation along the lines of the pending bill probably will be enacted in 1960.

Rep. Simpson said that H. R. 4700, and similar legislation affecting the medical profession, "make it imperative that every doctor keep informed on legislative issues before Congress." He also urged that physicians "become patriotic political forces" by giving "their informed viewpoint" to lawmakers at all levels of government.

Rep. Simpson said it "is important" that opponents of H. R. 4700 develop "appropriate alternatives" to solve the health care needs of the aged.

He promised to continue to cooperate with the medical profession to guard "against the disastrous consequences of compulsory national health insurance.

"House Democratic Leader John McCormack of Massachusetts expressed hope that Congress next year will stamp final approval on another bill of particular interest to physicians. He praised the Keogh-Simpson bill (H. R. 10) as "meritorious legislation" and said it "should be enacted into law next year." The measure, which was passed by the House last spring but left hanging in the Senate Finance Committee, would provide income tax deferrals for selfemployed persons setting aside money for private retirement plans.

---

## THE NURSES TAKE A STAND

At its convention in 1958 the American Nurses Association took action in favor of promoting the Forand Bill. This year representatives of the Association testified in behalf of the Bill, not only urging its passage in its present form but also asking for an extension to cover private duty and public health nursing care, neither of which is in the Bill in its current form. The nurses thereby joined hands with the AFL-CIO in presenting a strong argument in favor of a bill which has seemed dangerous and unnecessary to the medical profession. The only outspoken opponent of the Bill among the medical groups was the American Dental Association. The American Hospital Association officially opposes but informally hedges considerably.

It appears that the nurses wavered for a while before making definite pronouncement of their stand. No doubt they take the compassionate and emotional view of the benefits to be obtained from such a bill, but they do not seem to absorb the implications which it carries for the regimentation and possible

destruction of the private practice of medicine.

The nursing profession has become more and more independent over recent years, and less and less like its old self. For this there may be very good reasons, but it is rather hard for the medical profession to see what it would suppose would be its staunchest ally go over to the enemy camp. It may be that the ladies with the lamps will serve as wreckers who will destroy the ship of medicine by kindling false beacons above the jagged rocks of the Forand proposal.

---

### INFECTIONS

The changing patterns of infection and the decrease of importance of certain organisms, along with the increase in threat from others, have been the subject of much discussion. An article in *The New England Journal of Medicine*\* gives a comparison of the role of infection in the production of fatalities in the period 1938-40 as compared with the period 1957-58. The records of two hundred deaths from each period were compared and certain distinct changes were noted to have occurred over the time which has elapsed. In the first period, infection played a part in the picture in 54% of cases, and in 28.5% infection was the chief factor in the fatalities. In the latter period only 29% showed evidence of infection as an important part of the picture in these fatal cases, and in only 14% was infection the chief demonstrable cause of death. Thus the importance of infection has been cut almost in half over a period of time when the newer remedies have been in general use.

The decrease in the importance of the pneumococcus, the streptococcus, and the tubercle bacillus has been most pronounced, and showed a tremendous drop from the figure of 40 in the first group to 4 in the latter group. They have lost greatly in their status as causes of death. Contrary to the thoughts of many people at this time, the staphylococcus has not increased particularly in its importance statistically as a killer. However, it has of course risen tremendously in the concern of hospital staffs because acquisition of staphylococcal infections seems to come so much more

often from the hospital than from elsewhere. There has been also a marked increase in the fatalities from entero-bacterial organisms, chiefly *Esch. coli* but also *pseudomonas aeruginosa* and the mycotic infections.

Some light is thrown on the lack of efficacy of antibiotics in many of our problems by the finding that in the latter, practically current, period there were 15 patients who died in spite of receiving antibiotics, whereas in 1938-40 only 4 died while under treatment with antibiotics.

Another observation is to the effect that the prophylactic use of antibiotics has been very unsatisfactory.

---

### A PROTEST

by

N. R. Morris\*

The modern M. D. and his anomalous yen  
With pen in hand to beat arrhythmically  
Some poor failing sequence of prose  
Into a poem (vision of a latter-day Shelley)  
Would do better to examine that stool,  
Boil urine . . . Sleep!

For remember:

O. W. Holmes

Wrote poems.

\*Fourth-year student, Yale University School of Medicine

--  
—Reprinted from *The New England Journal of Medicine*, Jan. 1, 1959.

---

### "THE LADY DOTH PROTEST TOO MUCH, METHINKS"

by

Park Jerauld White, M. D.

St. Louis, Missouri

So say I to N. R. Morris of Yale University School of Medicine, who writes "A Protest" in the New Year's Day issue of the *Journal*. Whether N. R. Morris is a lady or not, let's say *he* writes as follows:

(Here is quoted the Morris poem)

Brek-ke-kek-kek-ko-ax to him!

I take my poetical axe to him!

Examine a stool? Boil wee-wee? Ouil!

O. Holmes wrote polmes? Why, so do we!

Ha! Wendell Senior's our patron saint!

Down with you, Morris, and your complaint!

We hope your prosaic tribe decreases

Who'd trade us bards for a jar of feces.

New England's *Journal* is none the worse

For flavoring medicine with sweet verse.

—Reprinted from *The New England Journal of Medicine*, May 14, 1959.

---

\*New England J. Med. 261:677





## BLUE CROSS . . . BLUE SHIELD



To the patient and his family an illness is a total experience, and the total cost is something which must somehow be met. Hospital costs have gone up 258 per cent since 1946, and there is reason to believe they will increase further. Charges for physicians' services have also increased and in some situations seem uncontrollable. To meet this problem voluntary insurance has emerged and has grown unbelievably since the early 30's. There are many unsolved problems, however, some of which will be directly under your control as physicians. One of these is hospital utilization. Physicians admit patients to hospitals, prescribe what services they shall receive, and determine how long they will stay. Hospital utilization, directly under the control of the physician, continues to climb upward each year. The effect on the health insurance plans such as Blue Cross which pay the bills from the subscribers' pooled premiums is catastrophic. Several plans have had to ask for large premium increases, and these requests have caused public concern and sharp criticisms in public hearings. Governmental or quasi-public studies or investigations are now under way in at least five states. State superintendents of insurance who have considerable authority are watching the situation closely, and in Pennsylvania a sweeping ruling has already been issued, having a direct bearing on the practice of medicine, a ruling based on a growing belief that health services are a public trust, subject to public review.

You, as future physicians, will have to share the responsibility for keeping the costs of medical care at as low a level as possible—but compatible with good medicine. For example, at present if the average length of stay of Blue Cross patients were reduced  $\frac{1}{2}$  day and if one in every 50 Blue Cross patients were kept out of the hospital through some other form of care, the saving in Blue Cross payments would be many million dollars a year in New York State alone. Since length of stay and admission rates are a function of the physician's decision, the opportunity to render a public service is inescapably obvious. Yet we must not be stampeded into arbitrary action. The foundation of good practice is a good diagnosis. If diagnostic procedures are not to be rendered to an in-patient, then they must be financed and provided on an ambulatory basis. If the patient is to have a shorter length of stay in the hospital, then home care at one-fifth or one-sixth of the cost is the alternative. Fortunately, during your next 4 years you will have an opportunity to examine two excellent affiliated teaching hospitals which have ambulatory diagnostic

clinics and have given home care for many years—the Mary Imogene Bassett Hospital in Cooperstown and Montefiore Hospital in New York City.

Beyond exercising reasonable prudence with respect to hospital utilization for his patients, the physician's most direct effect on the cost of medical care is his own fee schedule. Will you overcharge your patients? Will you fail to observe the service benefit agreement you have entered into for your Blue Shield patients? Will you gradually raise your rates to take advantage of the lack of fixed-fee schedules under certain forms of commercial health insurance, thus contributing to the creeping inflation which is much more costly than the occasional excessive bill? Examples of these practices are common and have caused so much concern that certain consumer groups are establishing alternative systems of care through salaried group practice in community hospitals—the United Auto Workers being the most recent example.

And finally, there are those groups without insurance or other resources—the aged, the unemployed, the minority groups, the medically indigent. Further public action on behalf of such people is inevitable and requires intelligent and reasonable participation by the profession.

Medical care is a highly personal and privileged interchange between the patient and his physician. To belabor this point is to take up the time of this audience. When a single patient seeking care on his own is dissatisfied with an individual physician he can change physicians and there is no public reaction. However, when large groups of people are dissatisfied with their group system of medical care their reaction can, indeed, result in a large-scale decision on the part of their leaders. Among the many studies of medical care which have been done in the past few years is one which involved detailed interviews with patients comparing different systems of medical care under which they had received physician services. There were two outstanding aspects of the patients' assessment of good care: First, the interest of the physician in the patient, and, second, the adequacy of his care—usually measured in terms of thoroughness. People are neither insensitive nor ignorant, and when they react in large groups to their individual care their concern is translated into group decision to modify the way in which they receive care. Such changes are occurring yearly and are worthy of careful observation for the significant factors which bring them about.

The Public Concern—Roy E. Trussell, M. D.  
*Jour. Med. Educ.* 34:539

---

## NEWS

---

### MEDICAL GROUP HONORS DR. HENNIES

A 50-year pin from the South Carolina Medical Association was presented to Dr. George A. Hennies recently when he was guest of honor at a dinner by the Chester County Medical Society.

The dinner was the occasion of his retirement from practice and from the position of county physician. Dr. John Brewer, Newberry, presented the pin.

Dr. Halsted Stone, president of the Chester society, presided and introduced special guests among 38 attending the dinner at Pundt's Restaurant.

After nearly half a century, Dr. Hennies is retiring from formal practice of medicine along with his duties as county physician.

He is a native of Columbia and a 1910 graduate of the Medical College of South Carolina. He came to Chester in 1911 and has been county physician since 1921.

The young Dr. Hennies chose Chester because of a friendship with James Land, who was studying pharmacy at the same time Dr. Hennies was studying medicine. Later Land and Dr. R. C. Love set up a drug store in Chester and they wanted a doctor to be associated with them.

---

### DR. ELYAN SERVES ON WHITTEN VILLAGE STAFF

Dr. B. O. Whitten announces the addition of Dr. Michael Elyan to the medical staff of Whitten Village on August 3, to serve as clinical director and assistant to the superintendent.

Dr. Elyan was born in Dublin, Ireland. He received his literary and medical training there and moved immediately to London, where he worked in various hospitals in medical capacities. From there he went to Australia, serving in that country for several years before leaving to come to the United States. His studies have been mainly in the field of pediatrics and child welfare.

---

### PIEDMONT ASSEMBLY

Dr. John T. Davis of Walhalla was elected president of the Piedmont Post-Graduate Clinical Assembly Thursday as the group ended its 24th annual meeting at Clemson House. He replaces Dr. Herbert Blake of Anderson.

Other officers are Dr. Sam H. Fisher, Greenville, executive vice president; Dr. James H. Sanders, Gaffney, vice president; Dr. A. Ellis Poliokoff, Abbeville, vice president; Dr. Ned Camp, Anderson, secretary-treasurer; and Dr. Hervey W. Mead, Pendleton, registrar.

---

### ACADEMY OF G. P.

On October 3, Dr. William P. Hendrix of Spartanburg was installed as president of the South Carolina Chapter of the American Academy of General Prac-

tice, succeeding Dr. I. Ripon Wilson of Charleston.

Dr. Hendrix had served as president-elect the past year. Named to succeed him as president-elect was Dr. Martin Teague of Laurens. He will take office at the 1960 convention Sept. 29-30 at Spartanburg.

Other new officers installed at the closing session were Dr. Sam J. Garrison of Johnston, vice president; and Dr. Horace W. Whitworth of Greenville, secretary-treasurer.

New directors of the academy are Dr. Thaddeus Timmons of Lake City, District 6; Dr. Richard E. Hunton, Greenwood, District 3; Dr. William G. Whetsell, Orangeburg, District 8; and Dr. Harold F. Hope, Union, District 9.

Dr. Harold Jervey of Columbia was named to a two year term as delegate to the national society. Dr. George Price of Spartanburg was elected delegate for a one year term. Their alternates, respectively, are Dr. Richard Johnston of St. George and Dr. William Stuckey of Sumter.

A total of 157 physicians registered for the two-day meeting at Clemson House, largest attendance in the chapter's history.

---

Dr. S. L. Collins and Dr. W. R. Griffin moved to new offices on October 1, 1959 at 10th Avenue and Burroughs Street, Conway.

---

Announcement was made by the Pickens Medical Society that Dr. Robert G. Mann, of Pickens, is now associated with Dr. J. H. Jameson and Dr. J. A. White in the practice of general medicine at their Easley offices.

Dr. Mann has been associated with Dr. S. A. Garrett at the Garrett-Mann Clinic in Pickens for the past nine months.

Dr. Mann graduated from the Medical College of South Carolina in 1956. Following his graduation he interned at Greenville General Hospital. He has also completed a two year tour of duty in the U. S. Air Force Medical Corps where he holds the rank of captain.

---

Dr. Elizabeth B. Latham announces that her practice is being discontinued.

Dr. James E. Padgett, Jr. (now of Ft. Jackson, S. C.) will enter Pediatric Practice in Aiken, starting in July, 1960, and will be in possession of Dr. Latham's Medical History Records.

---

Dr. B. F. Emanuel announces the new location of his office at 117-119 Williams Street, Lancaster.

---

### PUBLIC RELATIONS COMMITTEE NOTES:

There is always confusion in medical circles about the meaning of Public Relations. There is a tendency to confuse it with press agency. The physician, internist or not, keeps hoping that someone will do his public relations for him. But the practice of medicine, particularly internal medicine, is basically a very personal relationship between physician and



patient. Component societies and the ASIM can help, but only to the extent that they can build upon the "public relations" of the individual internist in his office, in the hospital and in the community.

The ASIM Public Relations Committee believes that a successful public relations program for the internist must be based upon a "grass root" program at state and local levels and in the relationship between the internist and his patient and the internist and his friends in the community. It also entails coordination, communication and understanding among societies of internal medicine. In general, it has been found, that good medical public relations result when our efforts and our problems are expressed in terms of the patient's interests rather than in terms of the doctor's survival, convenience, or economic gain. Perhaps this fact should be the keystone of the public relations program for the internist.

Malcolm S. M. Watts, M. D., Chairman  
*American Society of Internal Medicine*

Dr. John T. Davis of Walhalla, prominent Oconee county physician was elected president of the Piedmont Post Graduate Clinical Assembly as the group concluded its 24th annual meeting at the Clemson House. He succeeds Dr. Herbert Blake of Anderson in that position.

Other officers named to serve during the coming year include Dr. Sam H. Fisher of Greenville, executive vice president; Dr. James H. Sanders of Gaffney, vice president; Dr. A. Ellis Poliakoff of Abbeville, vice president; Dr. Ned Camp of Anderson, secretary-treasurer; and Dr. Harvey W. Mead of Pendleton, registrar.

#### DERMATOLOGISTS MEET

Dermatologists of the Carolinas convened at the Hotel Columbia September 19-20 for their semi-annual conference.

Scientific sessions included presentation of case histories by Drs. Leon S. Bryan, J. Richard Allison, Sr., J. Richard Allison, Jr., and A. M. Robinson, all of Columbia.

The doctors attended the University of South Carolina-Duke football game, and concluded their meeting September 20 with a banquet.

The dermatologists meet to develop and stimulate interest in dermatology in the Carolinas. There is no organized body of officers.

#### MEDICAL COLLEGE GRADUATE HEADS WORLD PROGRAM

Dr. Pearce Bailey of Washington, D. C., a 1941 graduate of the Medical College of South Carolina, has been appointed director of a new international neurological research program.

As head of the international programs of the National Institute of Neurological Diseases and Blindness, Dr. Bailey will encourage the worldwide exchange and coordination of scientific knowledge relating to neurologic and sensory disorders.

Dr. Bailey served his internship at Roper Hospital from 1941 to 1943. He has been director of the National Institute of Neurological Diseases and Blindness for eight years. He was a founder and secretary-general of the World Federation of Neurology. Before assuming the institute post, he was chief neurologist for the Veterans Administration's central office.

#### WAGENER ACCLAIMS SERVICE OF DOCTOR

An impressive community reception honoring Dr. H. H. Brodie for 43 years of service in the Wagener area was held in August at the Wagener Elementary school.

The event also served as a welcome for Dr. and Mrs. R. L. Worrell of Batesburg and Columbia who are coming to Wagener at the invitation of the community.

Around 300 people crowded the school auditorium as Dr. and Mrs. Brodie were presented with a silver tray on behalf of the town. The presentation was made by Mrs. Loneene Huggins, local school teacher, and Luke Cook, 92, the oldest member of the community.

Mrs. Huggins told of the untiring professional and civic service that Doctor Brodie had rendered to Wagener and said that "tonight it is a great honor for me to stand by a man who has stood by me in many crisis."

Mr. Cook presented Dr. and Mrs. Brodie with a silver tray with an engraving which expressed the love and devotion of the Wagener area people. Mrs. Huggins noted that she once asked Doctor Brodie how he managed to stand up under the strain and demands of his job and he told her, "I never get in a hurry or excited, I just take things as they come."

Doctor Brodie then responded to the community gesture by saying that "this is the greatest moment of my life." The crowd's applause for the beloved physician indicated they wanted the evening to be just that.

After Doctor Brodie was honored Dr. and Mrs. Worrell were called to the stage and Otis Baughman welcomed them to Wagener. Wagener Mayor John W. Tyler then presented Doctor Worrell with the key to the city and Doctor Worrell said that he felt called to Wagener and looked forward to working with Doctor Brodie.

Dr. Brodie was born in 1886 in the Tabernacle community. He received his early education at Salley and Edgefield schools and finished the Medical College of South Carolina in 1913.

He first practiced at Williston and later with Dr. W. A. Whitlock at Kitchings Mill before coming to Wagener in 1916.

Doctor Worrell was born in Columbia and named for the doctor who delivered him. He and his twin brother Edwin are the first twins to finish at the South Carolina Medical College. He finished at the University of South Carolina before going to the medical college where he graduated in 1958. He



interned at the Columbia Hospital of Richland county from July, 1958 to June, 1959.

Colquitt Sims, Jr., M. D. and Henry B. Hearn, III, M. D. take pleasure in announcing that Sam R. Moorhead, Jr., M. D. will be associated with them in practice limited to diseases of infants and children, Children's Clinic, 1411 North Fant Street, Anderson.

R. S. Higgins, M. D. announces the opening of his office for the General Practice of Medicine at 96½ Cannon Street, Charleston.

### MULLINS HOSPITAL ADDITION APPROVED

The initial project construction application for an addition to the Mullins Hospital in Mullins has been approved by the Public Health Service.

This project will provide an additional 16 general hospital beds as well as new ancillary service areas, including a new operating suite.

An exhibition in honor of the late Dr. McIver Willcox of Darlington was held recently at the nearby Florence Museum. The exhibition was from the Willcox collection of Indian tools, weapons and other things.

The Willcox Indian collection exhibition, for which plans were begun prior to the death of Dr. Willcox, is now being presented by the museum as a memorial to the late Darlington physician.

A Greenville business man, David W. Hiott, and a Columbia, S. C. surgeon, Dr. Charles L. Sloan, were elected directors of Palmedico, Inc. of Columbia, pharmaceutical specialists, according to the president of the corporation, Erby A. Walker, Jr. It was also announced that Dr. Basil Manly, IV, of Greenville and Dr. Hugh Cathcart of Charleston have been added to the firm's medical advisory board.

Charles R. Propst, M. D. takes pleasure in announcing that William F. Young, M. D. will hereafter be associated with him in the practice of Pediatrics at 21 East Calhoun Street, Sumter.

A program designed to foster medical research at Roper Hospital in Charleston has been created by the Medical Society of South Carolina.

First step in the local research project was the establishment recently of the Roper Hospital Memorial Research Fund.

At the joint Post Graduate Convention of the North Carolina Eye, Ear, Nose, and Throat Society of Ophthalmology and Otolaryngology in Charleston, Sept. 13-16. The following officers were elected by the South Carolina Society:

President, Dr. Harry Ross, Anderson

Vice president, Dr. David Stack, Spartanburg

Sec.-Treas., Dr. Roderick Macdonald, Rock Hill

An extensive program covering three and a half days was presented, and included presentations by a number of well known authorities. Local speakers presented a symposium on "The Tonsil and Adenoid Controversy!" They were: Moderator: Dr. Richard W. Hanel, Jr., Clinical Professor Otolaryngology, Medical College of South Carolina; Pediatricians: Dr. Joseph I. Waring and Dr. B. O. Ravenel, Charleston; Otolaryngologists: Dr. Walker Bates, Charleston and Dr. Frank Warder, Anderson.



"I brought her in so you can tell her about the er-r, birds and bees."

## ANNOUNCEMENTS

### TENTH COUNTY MEDICAL SOCIETIES CIVIL DEFENSE CONFERENCE

SPONSORED BY

COUNCIL ON NATIONAL DEFENSE  
AMERICAN MEDICAL ASSOCIATION

November 7-8, 1959

Chicago, Illinois

A conference on Mycobacterial and Mycotic Diseases With Special Reference To Childhood is to be held in New Orleans at L. S. U. Medical School on December 10, 11, 1959. This meeting is sponsored by the Tuberculosis Association of Greater New Orleans in cooperation with the Louisiana State University Medical School, the Tulane University School of Medicine, and the Orleans Parish Medical Society.

The Department of Ophthalmology of the Emory University School of Medicine announces a post-

graduate course in Applied Ophthalmic Pathology on December 3 and 4, 1959 at the Grady Memorial Hospital, Atlanta, Georgia. The guest lecturers will be Dr. Lorenz Zimmerman of the Armed Forces Institute of Pathology, Washington, D. C., Dr. T. E. Sanders of Washington University, St. Louis, Dr. J. A. C. Wadsworth of Columbia Presbyterian Medical Center, New York, and Dr. J. T. Godwin of Atlanta, Georgia.

The Mid-Atlantic meeting of the United States Section, International College of Surgeons, scheduled to be held at Hot Springs, Va., November 16-18, has been cancelled.

### SOUTHERN MEDICAL ASSOCIATION

Don't fail to come to the Atlanta meeting of the Southern Medical Association November 16-19. An excellent program has been arranged and you will enjoy both scientific and social aspects of the meeting. Come and bring a friend.

Southern has grown to such proportions that it is probable this is the last time for the foreseeable future we will be able to meet in Atlanta. The local organization has been very active there and you are assured of a warm welcome and a good time.

Southern has an excellent membership in South Carolina. My Associate Councillors are John M. Fleming of Spartanburg, R. W. Hanckel of Charleston, D. Strother Pope of Columbia, Thomas F. Stanfield of Anderson, and J. Howard Stokes of Florence. We shall all be glad to render what assistance we can to you at any time.

J. W. Jervey, Jr., M. D., Councilor

### NEW CLINICAL CENTER STUDY ON SJOGREN'S SYNDROME

The cooperation of physicians is requested in a comprehensive study of Sjogren's syndrome recently initiated at the Clinical Center, National Institutes of Health, Bethesda, Maryland. The cardinal manifestations are keratoconjunctivitis sicca, diminished or absent salivation and/or salivary gland enlargement and rheumatoid arthritis. The purpose of the study is to define the clinical, histological and immunological spectrum of the syndrome. For this reason patients are sought who manifest only dryness of the eyes and filamentary keratitis or xerostoma, as well as those who manifest the entire syndrome. Patients with scleroderma, systemic lupus erythematosus or periarteritis nodosa complicated by Sjogren's syndrome will also be admitted for study.

Physicians interested in the possibility of referring individual patients should write or telephone:

Dr. Joseph J. Bunim  
Clinical Director  
National Institute of Arthritis and  
Metabolic Diseases  
Bethesda 14, Maryland  
(OLiver 6-4000, Ext. 4181)

### DOCTOR'S ORDERS

"To students at the Medical College of South Carolina, Dr. William Weston, Jr. of Columbia, president of the South Carolina Medical Association, gave this advice for their own personal health:

"Don't lose your temper; don't get discouraged; don't give up reading good literature and newspapers, and don't give up all relaxation and recreation."

As a layman *The News and Courier* would be presumptuous to evaluate medical counsel from one of South Carolina's leading physicians. As a daily commentator on common sense, we heartily endorse what Dr. Weston has said, especially the part about reading newspapers. What's that old saw about a newspaper a day . . . but who wants to keep away nice doctors when they give such good advice?"

*News and Courier*

### DEATHS

#### DR. CHARLES OSCAR BATES

Dr. Charles Oscar Bates, 73, prominent physician and surgeon of Greenville for many years, died at a local hospital following several years of declining health.

Dr. Bates was born at Clifton, S. C., on August 3, 1886. He attended the University of Georgia, where he received his M. D. degree on May 1, 1909.

Since that time he has studied in clinics in Philadelphia, New York and prominent cities of Europe.

For 15 years he did general practice as a physician, later specializing and becoming a surgeon. He came to Greenville in August, 1909, and became assistant to Dr. Curran B. Earle. In 1923, Dr. Earle and Dr. Bates formed a partnership.

Throughout all his career as a physician and surgeon, Dr. Bates had practiced with great skill and success and was recognized as a leader in his profession. He followed in the foot-steps of his father who was also a physician and surgeon.

When the Shriners began their work for crippled children in the United States and before the Shriners Hospital was established in Greenville, Dr. Bates agreed to do the surgical work without charge.

This was done for several years as a clinic was conducted at Parker High School. The Hejaz Temple of the Shrine presented Dr. Bates with an inscribed pitcher in 1927, for his contribution to their work.

He was a Fellow in The American College of Surgeons, a member of the Greenville County Medical Society and the International Congress of Surgeons. He was a member and past president of the Southern Railway Surgeons Association and was surgeon for C&WC Railway at the time of his death.

He was a member of the Greenville City Board of Health for many years and was serving as chairman. He had served as president of both the General Hospital and the St. Francis Hospital staffs.

He was a Rotarian and had served as a director. He was serving on the Board of Directors of Peoples



National Bank. He was a past president of the Greenville Community Chest.

---

**MAJ. F. W. CHANDLER**

Major Frank W. Chandler, Air Force doctor was killed in a helicopter crash in Greenland.

Dr. Chandler was a Sumter native. He had been stationed at Thule Air Force Base, Greenland, since January.

---

**DR. J. A. THOMASON**

Dr. J. A. Thomason, 72, retired Fountain Inn doctor died September 25 at a Greenville hospital.

---

**IS MEDICINE MISSING THE TRAIN  
WHERE YOUTH IS CONCERNED?**

A program to attract talented high school and college students to the study of medicine was introduced by the American Medical Association and the Association of American Medical Colleges recently at the AMA's 1959 Public Relations Institute in Chicago.

Discussing the need for more medical students—and how to get them—were Walter Wiggins, M. D., secretary of the AMA Council on Medical Education and Hospitals; Gary L. Mills, Ph.D., director of guidance and special services at Glenbrook High School in Northbrook, Ill.; John A. D. Cooper, M. D., associate dean of Northwestern University Medical School in Chicago, and Debs Myers, director of program development for the AMA.

Dr. Mills replied that because medical school was many years ahead of the high school student, an aspiring medical student should concentrate on getting a broad, liberal education in his pre-medical school studies. He also pointed out that the medical schools and the medical profession could do a service to high school faculty advisers and vocational guidance counsellors by making known the fact that vacancies do and will exist in U. S. medical schools. He added that medical careers informational media would help the high school counsellors by making the opportunities and rewards of medicine better known to their students.

Dr. Cooper emphasized that well-prepared and qualified students will be accepted into medical school, but he advised learning the admissions requirements of specific schools so that the college student will follow the prescribed basic curriculum. He outlined the needs for more students in the future because of the variety of careers being developed through medical progress — in research, teaching, practice, and administration.

Because of the increased competition from other professions for the talented students, programs were being developed by AMA and AAMC to stimulate these students toward medicine.

Mr. Myers then outlined medicine's program and enumerated the services now available to state and county medical societies and medical schools to highlight the opportunities in medicine. These include all new materials: (1) a 25-minute 16 mm

color and sound motion picture entitled "I Am A Doctor", which was premiered at the Institute; a comprehensive handbook on "Medicine as A Career" for distribution to high school and college advisers containing a summary of high school, college, and medical school information to be used in counselling work; a brief pamphlet for wide-scale distribution to students, and a major exhibit on "Medicine—the Most Demanding Rewarding Profession" for showing at "career days", health fairs, and large community gatherings. These printed materials, he said, will be sent to medical societies and medical schools within a few weeks, and the film and exhibit may be requested from the AMA now.

---

**LEGISLATION TO "DERAIL"  
THE AMERICAN SYSTEM**

Just how many persons over 65 lack adequate medical care and would be helped by the passage of Forand-type legislation?

This question is the crux of the whole Forand bill problem, according to a panel of American Medical Association experts on legislation.

In a "Meet the Press" session at the recent PR Institute in Chicago, Aubrey Gates, director of field services for the A.M.A., said the problem of the health care of the aged must be circumscribed. It must be learned just how big the problem is and if it exists at all.

C. Joseph Stetler, director of the A.M.A. Law Division, pointed out that a survey must be conducted to find out just how many persons are not now receiving adequate care. It is presently estimated that about only 2 million persons would benefit from Forand-type legislation—yet many millions would be penalized by this type of government program.

Stetler suggested that the federal government might conduct a survey among selected communities in an attempt to learn the extent of the problem.

Dr. George Twente, Jackson, Miss., a member of the Council on Legislative Activities, felt there is no great problem. "We have been taking care of the aged for years and will continue to do so," he said. He also noted that many persons do not seek medical care because of superstition. "Can we legislate against superstition?" he asked.

Gates noted that between 60 and 65 per cent of those over 65 now have health insurance. The remainder either want no insurance or are already on public assistance.

Another major point made by the panel was that physicians need to be spurred to greater political activity. Stetler pointed out that 97 to 99 per cent of physicians agree with the A.M.A. opposition to Forand legislation; however, they express no active interest in the situation.

State and county societies, as well as the A.M.A., must encourage physicians to be more actively interested in political matters. The Forand bill, and similar health legislation, have grown out of medical advances which have made people live longer; thus



medicine itself helped create a political problem, Stetler said.

Other points made during the session were:

—To date no substantial extra amount of money has been spent by the A.M.A. in its opposition to the Forand bill. The campaign has been carried on within the regular budgets of the A.M.A. departments concerned with the problem (mainly the Council on Legislative Activities).

—The A.M.A. Washington office acts as an "arm" of the headquarters in Chicago. The two offices are in weekly telephone contact, with the Washington office carrying out the directions at the Chicago headquarters.

### Excerpts from the Constitution of SOUTH CAROLINA ASSOCIATION FOR RETARDED CHILDREN, INC.

The name of this Association shall be S. C. Association for Retarded Children. The Association shall be chartered as an eleemosynary organization under the laws of the State of South Carolina.

The principal office of the Association shall be at such place as the Board of Directors shall determine.

This Association is a non-profit, non-sectarian and non-political organization which shall take no position in matters other than those concerning mental retardation.

The principal objects and purposes for which this Association was formed are as follows:

1. To promote the general welfare of mentally retarded children of all ages everywhere; at home, in the communities, in institutions, and in public, private and religious schools;
2. To further the advancement of all ameliorative and preventive study, research and therapy in the field of mental retardation;
3. To develop a better understanding of the problem of mental retardation by the public and to cooperate with all public, private, and religious agencies, international, federal, state, and local, and departments of health, education, welfare and institutions;
4. To further the training and education of personnel for work in the field of mental retardation;
5. To encourage the formation of parents' groups, to advise and aid parents in the solution of their problems, and to coordinate the efforts and activities of these groups.
6. To further the implementation of legislation in behalf of the mentally retarded;
7. To serve as a clearinghouse for gathering and disseminating information regarding the mentally retarded, and to foster the development of programs in their behalf; and
8. To solicit and receive funds for the accomplishment of the above purposes.

Membership in this Association shall be open to all persons interested in the welfare of mentally retarded children either by affiliating with a chartered

local chapter as an Active Member or by direct affiliation with SCARC, as a Member-at-Large.

### SOUTH CAROLINA ASSOCIATION FOR RETARDED CHILDREN OFFICERS—1959-60

*President*—F. D. Martin, 3039 Exmoor Road, Columbia, S. C.

*1st. V. P.*—Mrs. Charles Graham, Box 36, Clio, S. C. (Marlboro Chapter)

*2nd. V.P.*—C. A. Traynham, 1115 Brannon Street, Greenwood, S. C.

*Secretary*—Mrs. Marguerite Heath, 17 Ackley Road, Greenville, S. C.

*Asst. Secretary*—Mrs. Brantz Mayer, Oakdale Court, Bennettsville, S. C. (Marlboro)

*Treasurer*—Leon Fuller, 3601 Wheat Street, Columbia, S. C.

*Immediate Past President*—Brantz Mayer, Oakdale Court, Bennettsville, S. C.

### LOCAL CHAPTER PRESIDENTS

Columbia Chapter—Mrs. Frank T. Currier, Qrts. 41-A Gregg Circle, Columbia, S. C.

Aiken Chapter—Mrs. Roper Day, Trenton, S. C.

Greenville Chapter—Mrs. Roy L. Haynes, Bidwell Drive, Rt. #3, Taylors, S. C.

Marlboro Chapter—Mrs. Kathlene Maddox, Bennettsville, S. C.

Hampton Chapter—Mrs. Lewis Cook, Varnville, S. C.

Charleston Chapter—Mr. E. L. Jagar, 203 Peoples Building, Charleston, S. C.

Florence Chapter—Mrs. E. E. Bullard, 1413 King Avenue, Florence, S. C.

Georgetown Chapter—Dr. John Assey, Georgetown, S. C.

Sumter Chapter—Mrs. J. R. Keisler, Jr., 37 Saratoga Road, Sumter, S. C.

Greenwood Chapter—Mr. John R. Corley, 304 Lindsey Street, Greenwood, S. C.

Edisto Chapter—Mr. Dan Evans, Santee, S. C.

Lancaster Chapter—Mr. J. R. Overcash, P. O. Box 503, Lancaster, S. C.

\*Orangeburg, Bamberg, and Calhoun Counties

### UNION ACQUIRES NEW PHYSICIAN

Union has a new doctor in Dr. Maynard W. Bland, a Gaffney native, who has begun general practice.

He attended Wofford College and graduated from Furman University. He interned at Greenville General Hospital after receiving his medical training at the Medical College of South Carolina.

### DEAFNESS CAUSED BY ANTIBIOTICS

The fact that injections of dihydrostreptomycin can cause irreversible deafness has been known for many years, and has been the subject of a number of cautionary reports (see "Current Concepts of Therapy"—*N. E. J. Med.*, 259: 85, 538: 1958). The drug continues to be widely used, nevertheless, largely in the belief that hearing damage results only from large or prolonged dosage.

A report on "Dihydrostreptomycin Deafness" by Dr. George E. Shambaugh, Jr. and seven other otolaryngologists, which is soon to be published, questions whether the drug can be safely used in any dosage. Dr. Shambaugh is Professor of Otolaryngology at the Northwestern University School of Medicine.

Over a four-year period, Dr. Shambaugh and his colleagues observed 22 cases of irreversible loss of hearing directly attributable to dihydrostreptomycin and additional cases probably caused by the drug. In some of the cases deafness resulted from injections given "not for severe infections as life-saving measures but prophylactically in uninfected surgerv cases or for mild, common infections . . ." In nine of the cases reported, the total dosage of the drug was between one and five grams.

It has been known for some time that the loss of hearing with dihydrostreptomycin is often progressive after use of the drug is stopped. Furthermore, there can be a latent period of several weeks to as long as six months between the administration of the drug and the onset of hearing loss. Because of this latent period, the report says, "The prescribing physician usually had not the remotest idea of the eventual disastrous results."

**INCIDENCE OF HEARING LOSS**—The authors refer to the paper by A. Glorig (*Annals of Otolaryngology and Rhinology*, 60:327, 1951) which reported loss of hearing in about a third of a group of tuberculosis patients who had received dihydrostreptomycin in doses of two to seven grams weekly for several weeks. Dr. Shambaugh and his colleagues recommend that ". . . this antibiotic should be omitted from commercial combinations of antibiotics or, if included, its presence should be clearly indicated in the name. Since streptomycin is as effective as dihydrostreptomycin for gram-negative and acid fast (bacillary) infections and since toxic reactions occur immediately, are more easily recognized, and less permanently disabling, there seems to be little reason to utilize the more dangerous drug." (Streptomycin can cause irreversible vestibular damage, affecting balance, but patients can learn to compensate for this impairment.) If dihydrostreptomycin is absolutely essential, as for treatment of seriously ill tuberculosis patients who are sensitive to streptomycin, as small a dose for as short a period as possible should be used.

The report lists the following mixtures of dihydrostreptomycin with other antibiotics among the agents responsible for deafness in the series observed. Dicyclicin (Squibb), Dihydrocillin (Upjohn), S-R-D (Parke-Davis), Districillin (Squibb), Bicillinycin (Wyeth), Cillinycin (Wyeth), Combiotic (Pfizer), Durycin (Lilly), Crysdimycin (Squibb), and Strocillin (Abbott).

**KANAMYCIN AND NEOMYCIN DEAFNESS**—Dihydrostreptomycin is not, of course, the only antibiotic that can affect hearing. *The Medical Letter*

cautioned in its "pre-publication" issue, that irreversible loss of hearing may follow the parenteral use of kanamycin (Kantrex-Bristol), and that this drug should be used parenterally only for severe staphylococcus or other infections, and only after safer antibiotics had proved ineffective. In view of the current promotion of Kantrex as "the logical 'first-choice' antibiotic," the following statement by Dr. Shambaugh and his colleagues is significant: "Because of its known ototoxicity, neomycin is now restricted to non-parenteral use except as a life-saving measure. *Kanamycin may soon be relegated to a similar category*" (our emphasis).

*The Medical Letter*

---

## BOOK REVIEWS

---

**MOLOY'S EVALUATION OF THE PELVIS IN OBSTETRICS.** By Charles M. Steer, M. D., 2nd ed. Philadelphia: W. B. Saunders Co., 1959, Price \$4.00.

This little volume of 123 pages reports further on studies of the architectural differences in the pelvis and their effects on labor which were begun 33 years ago by Dr. Howard Moloy and Dr. William Caldwell. These later studies were begun by Dr. Moloy and were completed after his death by Dr. Steer. The author states in the preface that these studies allow "a complete presentation of our knowledge of the pelvis in obstetrics."

The various types of pelvis are classified. Methods of recognizing them are discussed. The outcome of labor in varying degrees of disproportion is detailed.

The book is not intended to replace standard text books of obstetrics. Instead, if the operator is already familiar with the various methods of delivery, a thorough knowledge and understanding of the pelvic types and methods of recognizing them, as they are described, will make it possible for him to select the appropriate method of delivery.

The book is in five sections. The first deals with the general morphology of the pelvis and includes a classification. Section two describes the technique of clinical examination of the pelvis. Section three discusses and describes the mechanism of labor. The fourth section discusses the significance of pelvic shape in the treatment of various types of arrested descent of the presenting part. The last section is a detailed discussion of the steps to be taken in recognizing the presence of cephalopelvic disproportion. These steps involve clinical examination and classification, observation late in pregnancy of the size of the child and probability of engagement, re-examination at onset of labor, trial of labor and estimation of disproportion by x-ray pelvimetry.

Although the book would probably not interest the general man too much, the specialist and especially one who has an active consultation practice will find it interesting and helpful.



The line drawings and illustrations are excellent, the references are adequate, and the index is comprehensive.

J. D. G.

---

*ELEMENTARY STATISTICS WITH APPLICATIONS IN MEDICINE AND THE BIOLOGICAL SCIENCES.* By Frederick E. Croxton, Paper bound \$1.95, PP 376 with numerous mathematical tables and illustrations (Dover Publications, Inc., New York, 1959. Price \$1.95.

This is a corrected republication of the work first published under the title "Elementary Statistics with application in Medicine" in 1953. The material is presented in a readable manner and only a modest knowledge of mathematics is necessary to understand and to use the text material. Twelve chapters and fourteen tables in the appendix present the statistical approach very adequately beginning with definitions and an explanation of distribution and working up through methods used for determination of the significance of groups of data by the Chi Square Test and other tests for variances. Actual data collected in specific observations are used throughout the text.

W. McCord

---

*INDUSTRIAL CARCINOGENS,* by Robert E. Eckardt, Grune and Stratton, New York, 1959. Pp. 164.

This small volume on industrial carcinogens is intended for the beginner. The author makes no claim to being a cancer specialist, either in the experimental or clinical field. Dr. Eckardt's years of experience, however, in the capacity of a clinician supervising the industrial hygiene and toxicology research in the petroleum industry have fitted him for his task of making a broad review of the present status of carcinogens in industry, and their relation to occupational cancer. The well selected references at the end of each of the six chapters will give the reader an appreciation of the extensive field of industrial carcinogens.

John R. Sampey

---

*VASCULAR SURGERY,* by Geza deTakas, W. B. Saunders Company, Phila. 1959. Price \$17.50.

This text is designed to correlate the increasing knowledge of basic vessel physiology and pathology to modern methods of treatment. This is accomplished in a well-documented and practical manner. The entire book will not be of interest to all readers, but because of the properly outlined material, it can be used as an adequate reference guide for practitioners in all phases of medicine. Certainly, all physicians who treat vascular disease, should have this book available to their practice.

The book is divided into four parts. The diagram and illustrations are adequate supplements to the written data. Part I describes the "Fundamental Principles affecting Vascular Surgery" in a readable and

interesting way. In Part II both clinical and laboratory "Methods of Diagnosis" are clearly defined. Part III deals with "Vascular Syndromes Requiring Surgical Care". Here, artery, lymphatic, and venous disorders are categorized for detailed or quick references. Part IV describes "Surgical Technique" according to modern day standards. Arterial grafts, venous resections, lymphatic operations, are a few of the subjects covered by anatomical drawings, photographs and explicit descriptions.

J. Manly Stallworth, M. D.

---

*PREVENTIVE MEDICINE.* II. E. Hilleboe and G. W. Larimore, W. B. Saunders Co. Phila. 1959. Price \$12.00.

This newest compendium on the arts and sciences of keeping people well is about as comprehensive as any similar work seen to-date. It contains chapters by over thirty well known specialists in Public Health fields, and each of them an authority

It covers the ancient and well worn problems such as Venereal Disease and Insect Vectors and goes all the way into tomorrow with consideration of Air Pollution and Ionizing Radiation; nor does it stop with technical information, but adds discussions of techniques, follow-up, and education.

Dr. Hilleboe, writing the preface to the book, emphasizes "the new way to look at preventive medicine for medical students, general practitioners, specialists and professional workers in official and voluntary health agencies." Simply stated, the theme of the book is what the authors term "secondary prevention". Primary prevention—always our first goal—is fairly easily obtained with present knowledge and methods, but secondary prevention—the prevention of progression of disease—is more difficult, more costly, and less likely to be successful, because damage to the human body is already present.

In my opinion this is a wonderful resource book—one to keep on the library shelves until time to look up some specific problem—but not one that makes for easy reading in the long winter evenings.

Its very arrangement enhances its value for reference, but at the same time reminds me of the girl who was given "a book" as a gift; it was a dictionary, but she felt dutybound to read it. Her comment was, "Well, it's a good book, but it surely does change the subject often."

John M. Preston, M. D.

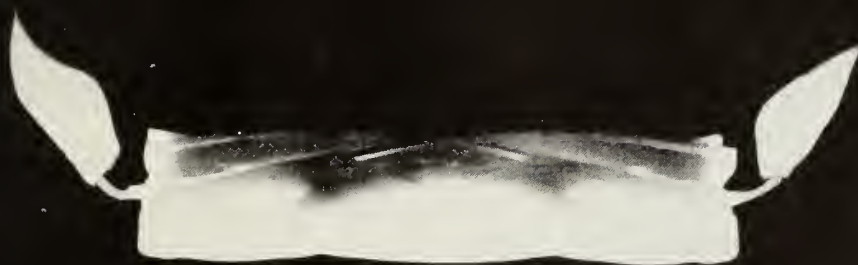
---

*DISEASES OF METABOLISM,* Edited by Garfield, G. Duncan, with 22 contributing authors, Fourth Edition, W. B. Saunders Co., Philadelphia, 1959. Price \$18.50.

The Fourth Edition of *DISEASES OF METABOLISM* is again one of the best textbooks of medicine. As compared to the Third Edition, numerous changes are evident. New authors have rewritten many of the



When the vagus burns at both ends



## Pro-Banthine® with Dartal® moderates both mood and gastrointestinal spasm

The slow simmer of anxiety frequently causes kindred gastrointestinal overactivity. The spasticity and the accompanying distress of excess acid lead to loss of efficiency. Patients subject to such psychoenteric upsets require therapy to calm both ends of the vagus.

Pro-Banthine with Dartal contains two agents required for such dual therapy: Pro-Banthine to control and curtail the flare-ups of spasm, excess acidity and excess motility,

and Dartal to smother simmering anxiety and tension.

Pro-Banthine with Dartal contains 15 mg. of Pro-Banthine (brand of propantheline bromide) and 5 mg. of Dartal (brand of thiopropazate dihydrochloride) in each tablet.

*Dosage:* One tablet three times a day.

G. D. Searle & Co., Chicago 80, Illinois.  
Research in the Service of Medicine.

sections of the book, and in addition to the rewriting of most of the chapters, the most recent concepts in regards to basic physiological and biochemical mechanisms have been introduced with correlation with the clinical aspects and therapy of various disorders. There are abundant charts, tables, diagrams, and illustrations to aid in the elucidation of physiological phenomena and their clinical applicability.

The Fourth Edition of this text is again heartily endorsed as one which will be of considerable value to the medical student, the internist, and the general practitioner.

Vince Moseley, M. D.

**TRAUMA.** Harrison L. McLaughlin, M. D. W. B. Saunders Co., Philadelphia, 1959. Price \$18.00.

Dr. McLaughlin, assisted by nineteen contributors has compiled a very complete book on the broad subject of Trauma. It is very difficult to cover so much without the work appearing to be a compendium. I found it very full in explanation though condensed. Copious and excellent illustrations permit this and add much to clarity.

The first part of the book deals with principles in the treatment of trauma. The treatment of fractures is simplified and the author draws on his vast experience to give what he considers the best treatment in a variety of fractures rather than several types of treatment which might confuse.

The work should be particularly useful to the medical student and house officer.

John A. Siegling, M. D.

**CLINICAL OBSTETRICS AND GYNECOLOGY.** Publisher, Paul B. Hoeber, Inc., New York 1958. Per Annum \$18.00.

*Clinical Obstetrics and Gynecology* is a quarterly publication. Each issue consists of two symposia, one in obstetrics and one in gynecology. Each symposium deals with a single subject, the many facets of which are discussed by authors well recognised in their particular fields. Thus one can rapidly ascertain the well-rounded, current opinion on important topics. This quarterly does not duplicate either the Year Book of Obstetrics and Gynecology, or The Obstetric and Gynecologic Survey. Its articles are not extracts or reviews of previous articles, but unabridged articles currently written for publication in that particular quarter. The series would be especially helpful to candidates for American Board examinations, as well as to teachers and clinicians.

J. Richard Sosnowski, M. D.

**TEXTBOOK OF PEDIATRICS**—Edited by Waldo D. Nelson with the collaboration of eighty-one contributors. Seventh Edition. 1462 pages. W. B. Saunders Company, Philadelphia, 1959. Price \$16.50.

Nelson's *Pediatrics* has been for many years a popular standard text which has provided the best for

student and practitioner. While the new edition is a trifle shorter than the one preceding it, it still covers the essentials of pediatrics in an excellent manner. The book is authentic, readable and useful for any physician. A number of new collaborators have been added to the long list and most of the older writers are still to be found in this work.

In the minds of many pediatricians, this book represents the best available text and reference source.

JIW

## SOUTH CAROLINA MEDICAL ASSOCIATION BUDGET FOR 1960

ADOPTED BY COUNCIL OCT. 7, 1959

Secretary	
Office Help	\$ 900.00
Office Expense	600.00
Travel	500.00
Treasurer's Expense	100.00
Journal	
Office Expense	1,500.00
Editor's Salary & P. R.	3,000.00
Adv. Mgr.'s Salary	1,200.00
Printing	25,000.00
Executive Secretary	
Salary	10,000.00
Office Help	7,500.00
Travel	1,500.00
Rent	1,200.00
News Letter	800.00
Office Supplies	1,500.00
Tel. & Tel.	1,500.00
Utilities	100.00
Conf. & P. R.	750.00
Insurance	600.00
Postage	1,000.00
Delegates to A.M.A.	
Travel	1,800.00
President's Expense	1,200.00
General	
Woman's Auxiliary	750.00
President's Gift	200.00
Historical Committee	500.00
Infant & Child Health	200.00
Maternal Welfare	200.00
Contingent Fund	1,500.00
Civil Defense	500.00
Auxiliary Bulletin	1,000.00
Medico-Legal	2,000.00
Publicity	300.00
Annual Meeting	-----
P. R. Committee	2,300.00
A.M.A. Meeting (Joint Host)	500.00
Committees—Expenses	500.00
Total	\$72,700.00

NEUROSURGERY; MEDICAL DEPARTMENT, UNITED STATES ARMY; SURGERY IN WORLD WAR 2, Editor in Chief—Colonel John Boyd Coates Jr., MC, Editors for Neurosurgery—R. Glen Spurling, M. D. & Barnes Woodhall, M. D. 1st Edition. U. S. Government printing office, Washington, D. C. 1958. Pp. 466. Price \$5.00.

This book is a history of neurosurgery in World War 2, written by twelve neurosurgeons and their associates. Most of those neurosurgeons were quite active in the United States Army Medical Corps during World War 2. This is the first of two volumes. This volume deals with (1.) administrative details and policies as they were developed, (2.) the professional policies and (3.) the experiences with the many aspects of head trauma.

The small portion of the book pertaining to administrative considerations would be of interest to only a few. However, the experiences and details in the management of head injuries which comprise most of the book should be of considerable interest and value to anyone having a part to play in the diagnosis and treatment of head injuries. The book for the most part is easily readable, the illustrations are excellent and the index is comprehensive. Considering book prices today, the price seems quite reasonable.

Luther Martin, M. D.



provides therapeutic levels . . . for 24 hours . . .  
with low incidence of sensitivity reactions . . .  
**WHENEVER SULFAS ARE INDICATED**

# KYNEX

Sulfamethoxypyridazine Lederle

0.5 Gm. TABLETS/NEW ACETYL PEDIATRIC SUSPENSION

LEDERLE LABORATORIES, a Division of  
AMERICAN CYANAMID COMPANY, Pearl River, New York



## FURNITURE, SCIENTIFIC EQUIPMENT, INSTRUMENTS, LABORATORY EQUIPMENT AND SUPPLIES, ORTHOPAEDIC APPLIANCES, FRACTURE EQUIPMENT, SPLINTS AND SUPPLIES



Burdick Infra Red Lamp

Burdick pioneered the first infra-red lamp for medical use. Today, more than 50,000 Burdick Zoalites are in use in doctors' offices, clinics, and hospitals throughout the world.

Realizing the value of infra-red therapy as an aid in treating arthritis, injuries, and muscular aches and pains, doctors asked for a small portable lamp that could be prescribed for use in the home or office.

The Z-70 Zoalite, illustrated in this ad was the answer.

Price complete with adjustable floor stand  
\$38.00

Distributors of KNOWN BRANDS of PROVEN QUALITY



# W i n c h e s t e r

CAROLINAS HOUSE OF SERVICE

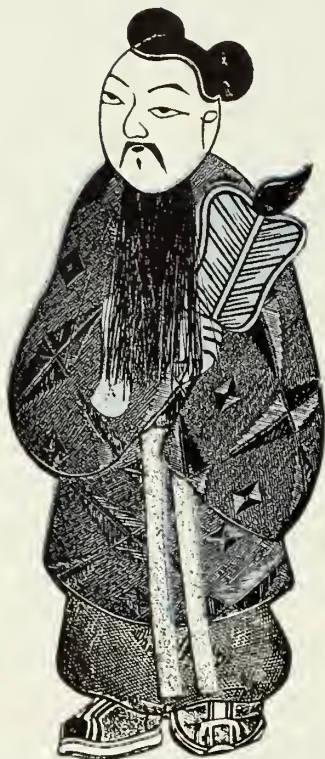


**Winchester Surgical Supply Co.**  
119 East 7th St. Tel. 2-4109 Charlotte, N.C.

**Winchester-Ritch Surgical Co.**  
421 W. Smith St. Tel. 5656 Greensboro, N.C.



*immortals of chinese mythology:*



## Chung-li Chu'an

This powerful magician revived the souls of the dead with a wave of his fan and gained a lasting place in Taoist legend

...this pioneer corticosteroid has proved invaluable in treating *millions* of living patients

# METICORTEN

METICORTEN,<sup>®</sup> brand of prednisone, 5 mg. tablets.

SCHERING CORPORATION • BLOOMFIELD, NEW JERSEY

You will soon receive in your mail a full-color, handmade, three-dimensional figure of this Chinese Immortal, mounted and suitable for framing.

P-918

*Schering*

## ADVERTISERS

Abbott Laboratories  
American Cancer Society  
American Medical Assn.  
Ames Company  
Appalachian Hall  
Ayerst Laboratories  
Bayer Aspirin (Glenbrook Lab.)  
Benton Laboratories  
Blue Shield  
Brawner's Sanitarium  
Bristol Laboratories  
Burroughs-Wellcome & Co.  
Charles C. Haskell Co.  
Davies, Rose & Co., Ltd.  
Drug Specialties  
Eli Lilly & Company  
Endo Laboratories  
Estes Surgical Supply Co.  
Geigy Pharmaceuticals  
Highland Hospital  
Jones & Vaughan, Inc.  
Kent Cigarettes  
Lederle Laboratories  
Mayrand, Inc.  
Merck, Sharp & Dohme  
Parke, Davis & Company  
Pfizer Laboratories  
Physicians Casualty Company  
Physicians Products Co.  
Pinebluff Sanitarium  
Professional Management South  
Reid Laboratories  
A. H. Robins Co., Inc.  
J. B. Roerig & Co.  
Sandoz Pharmaceuticals  
Schering Corporation  
G. D. Searle & Co.  
Smith-Dorsey  
Smith, Kline, & French  
United States Brewers Foundation  
Upjohn Company  
Wallace Laboratories  
Waverley Sanitarium, Inc.  
Wesson Oil & Snowdrift Sales Co.  
Winchester Surgical Supply Co.  
Winthrop Laboratories, Inc.  
World Insurance Co.

# The Journal

of the

## South Carolina Medical Association

VOLUME LV

December, 1959

NUMBER 12

## THE EVOLUTION OF MITRAL VALVULOPLASTY

WENDELL B. THROWER, M. D.<sup>o</sup>  
Charleston, S. C.

### *Introduction*

The introduction of a successful operation to correct mitral stenosis gave great impetus to all of heart surgery. The early endeavors of Cutler and Souttar in the nineteen twenties were the foundation for subsequent efforts.<sup>1,2</sup> Although Souttar attempted digital dilatation (1923) and his patient survived, it is doubtful that a great degree of valve function was restored. Nevertheless, his method of attack was sound and lay unappreciated for many years. The successful efforts of Harken and others during World War II in removing foreign bodies from the heart and great vessels stimulated further interest in valvular surgery.<sup>3</sup>

At the Medical College of South Carolina, Horace Smithy became a postwar pioneer in this field.<sup>4</sup> Although he performed a successful operation for mitral stenosis, Harken preceded him in reporting success,<sup>5</sup> followed by Bailey.<sup>6</sup> Since these initial reports, great strides have been made not only in the development of the operation, but also in the selection of patients for operation. Although significant aortic stenosis offered until recently a fatal consequence, as it was with Smithy, surgical correction can now be effected by a newly developed technique with a mortality of less than 10%.<sup>7</sup>

The life expectancy for significant mitral

stenosis treated medically is well known from the follow-up study of Olesen on a series of 351 medically treated patients before surgery was available.<sup>8</sup> This study revealed that only 51% of those 176 patients in Group III (handicapped with progressive failure) survived for seven years. A study of comparable surgically treated patients showed an 87% survival after seven years. In Group IV (terminal cases) survival in the patients operated upon was 54%, whereas it was 6% for the medically treated group at the end of six years. Such a contrast is striking. Furthermore, the operated group were more comfortable.<sup>9,10</sup>

### *Diagnosis*

In most cases the diagnosis can be made with certainty on the basis of symptoms of progressive failure, the typical auscultatory findings, right ventricular and pulmonary enlargement by fluoroscopy, and right ventricular hypertrophy by electrocardiogram. Occasionally the evidence for mitral stenosis is equivocal. By transcatheter catheterization of the left atrium under fluoroscopic guidance, pressures on both sides of the mitral valve can be measured.<sup>11</sup> Normally there is no gradient across the mitral valve during diastole. An obstruction produces an elevated atrial pressure and thereby a diastolic gradient. By simultaneously measuring the blood flow, the valve size can be calculated in square centimeters.<sup>12</sup> Left heart catheterization has been performed by the Harken group in over 400 cases. There was no mortality or significant morbidity.<sup>13</sup> Associated valvular disease, such as significant

<sup>o</sup>Assistant Professor of Surgery (Thoracic Surgery) Medical College of South Carolina.

Supported in part by the South Carolina Heart Association, and Grant HTS5337 and H4419 from the United States Public Health Service.

aortic stenosis can thus be ferreted out and appropriate surgical therapy instituted.<sup>7</sup>

Diagnosis during pregnancy must be made clinically because of the danger of radiation to the fetus. In the Harken group we found the objective cardiac signs are frequently difficult to evaluate during pregnancy. If the diagnosis can be made, however, a mitral valvuloplasty carries but little added risk if performed in the second trimester. Thereby both the mother and baby can be salvaged.<sup>14</sup>

#### *Discussion:*

The operative mortality for mitral valvuloplasty has continued to fall so that the risk in Group III is now less than 1%. This figure is based on a study of 1000 consecutive patients who had mitral valvuloplasty;<sup>15</sup> in other words, there were two deaths in the last 500 cases. Although others have felt that Group IV (terminal) patients are inoperable, we have accepted them for operation with an operative risk of about 20%. This higher mortality places a great burden on the attending physician to have the operation performed before the deterioration takes place, and the patient slips from Group III into Group IV. Improvement in a follow-up over five years has been sustained at about 80% in Group III, and 60% in Group IV. Thus the salvage rate, even in the terminal group, is surprisingly good, although not so striking as that for Group III.

Secondary recurrence of stenosis after an adequate valvuloplasty occurred in only eight cases of those 1000 patients reviewed by Ellis and Thrower.<sup>16</sup> On the other hand, when an inadequate operation is performed, refusion is more apt to occur. Thus it is extremely important that the best possible operation be done initially.

To do a proper valvuloplasty involves not only opening of the commissures, but also mobilization of the leaflets, separation of the chordae tendinae and the recognition of the difference between actual fracture and mere dilatation. The avoidance of catastrophic actions such as rupture of the aortic leaflet or

of a chorda is mandatory. This skill can only be gained by experience which comes with doing hundreds of such operations.

In instances of inadequate primary operation, fortunately reoperation is technically feasible. This is done by suturing an ivalon tunnel to the wall of the left auricle; this acts as an appendage for safety. Thus direct manipulation of the valve is possible without danger of laceration of the auricle and fatal hemorrhage. Here, as in the initial operation, the skill of the surgeon is of foremost importance.

In the past several years, we have become increasingly conscious of stenosis beyond the primary fusion of the leaflets. This distal fusion of chordae tendinae and papillary muscles is called secondary stenosis. At the initial valvuloplasty, the best chance is present for restoration of total valve function. Dilatation is completely inadequate and an utter failure. Thus commissurotomy as described by some is only part of the procedure.

The future developments in hypothermia and extracorporeal circulation may permit the procedure to be done under direct vision. Since the results of closed operation are excellent, however, the gain by waiting is not great and delay can be disastrous. Unless the patient can afford to wait a number of years, the operation should not be postponed on the grounds of possible technical improvements.

#### *Summary*

Mitral valvuloplasty has evolved from the pioneer work of Smithy, Harken, and Bailey, to a point where the mortality is less than 1% in skillful hands. Over 80% of patients obtain lasting benefit if operated upon before progression to the terminal phase. Even here, the salvage rate is 60%. Thus, a great burden rests upon the attending physician to have the patient operated on before deterioration occurs. Left heart catheterization is extremely helpful in differentiating mitral disease from other valvular diseases. Recurrence of stenosis is rare if an adequate valvuloplasty is performed initially.

#### REFERENCES

1. Cutler, E. C., Levine, S. A., and Beck, C. S.: The surgical treatment of mitral stenosis; experimental and clinical studies. *Arch. Surg.* 9:689, 1924.
2. Souttar, H. S.: The surgical treatment of mitral stenosis. *Brit. M. J.* 2:603, 1925.
3. Harken, D. E.: Foreign bodies in, and in relation



- to, the thoracic blood vessels and heart. I. Techniques for approaching and removing foreign bodies from the chambers of the heart. *Surg. Gynec. & Obst.* 83:117, 1946.
4. Smithy, H. G.: The control of arrhythmias occurring during operation upon the valves of the heart; experimental and clinical observations. *South. Surgeon* 14:611, 1948.
  5. Harken, D. E., Ellis, L. B., Ware, P. F., and Norman, L. R.: The surgical treatment of mitral stenosis. *New England J. Med.* 239:801, 1948.
  6. Bailey, C. P.: The surgical treatment of mitral stenosis (mitral commissurotomy). *Dis. Chest.* 15:377, 1949.
  7. Harken, D. E., Black, H., Taylor, W. J., Thrower, W. B., and Soroff, H. S.: The surgical correction of calcific aortic stenosis in adults, results in the first 100 consecutive transaortic valvuloplasties. *J. Thoracic Surg.* 36:759, 1958.
  8. Olesen, K. H.: Mitral stenosis, a follow-up of 351 patients. Copenhagen, Ejnar Munksgaards Forlag, 1955, pp 228.
  9. Ellis, L. B. and Harken, D. E.: The clinical results in the first five hundred patients with mitral stenosis undergoing valvuloplasty. *Circulation* 11: 637, 1955.
  10. Ellis, L. B., and Harken, D. E.: Factors influencing the late results of mitral valvuloplasty for mitral stenosis. *Ann. Int. Med.* 43:133, 1955.
  11. Harken, D. E., Black, H. B., Taylor, W. J., and Thrower, W. B.: Technique and results of left heart catheterization. Scientific exhibit, Annual A. M. A. Meeting, June 1957, New York City.
  12. Gorlin, R. and Gorlin, S. G.: Hydraulic formula for calcification of the area of the stenotic mitral valve, other cardiac valves and central circulatory shunts. *Am. Heart J.* 41:1, 1951.
  13. Harken, D. E., Technic of left heart catheterization. *Methods in Medical Research* 7:94, 1958.
  14. Taylor, W. J., Black, H., Thrower, W. B., and Harken, D. E.: Valvuloplasty for mitral stenosis during pregnancy. *J.A.M.A.* 166:1013, 1958.
  15. Ellis, L. B., Abelman, W. H., and Harken, D. E.: Selection of patients for mitral and aortic valvuloplasty. *Circulation* 15:924, 1957.
  16. Ellis, L. B., and Thrower, W. B.: Factors involved in the deterioration of patients who have improved following mitral valvuloplasty. *Proc. New England Cardiovascular Soc.* 16:37, 1958.

# INTUSSUSCEPTION OF CARCINOMA OF THE SIGMOID THROUGH THE ANUS

## REPORT OF A CASE

### COMPARISON OF COMPLETE RECTAL PROLAPSE WITH PROLAPSED SIGMOIDORECTAL INTUSSUSCEPTION

GAMEWELL A. LEMMON, M. D.  
Sumter, S. C.

When one first sees a prolapse of a sigmoidorectal intussusception, it may be confused with a complete prolapse of the rectum unless one keeps in mind the differences in these two entities.

Complete prolapse of the rectum involves all the structures of the bowel including the muscularis, so that a tumor several inches long protrudes from the anus. This protruding mass is covered with mucosa except at the point of exit from the anus, where the skin runs on to it and joins the mucosa at the mucocutaneous line. This means that the internal sphincter muscle forms part of the prolapse at its base. The opening of the lumen is at the apex. Between the double layer of prolapsed bowel is the elongated peritoneal cul-de-sac of Douglas anteriorly and the mesorectum is posteriorly.<sup>1</sup> This peritoneal sac makes this a true sliding hernia of the perineum. There is usually marked atrophy of the levator and

sphincter muscles.

In prolapse of a sigmoidorectal intussusception the anal region does not as a rule share in the prolapse, so the internal sphincter muscles and the mucocutaneous line remains within the sphincter canal. In this case a lumen can be seen at the apex and another lumen around the protruded bowel at its point of exit from the anus.<sup>1</sup> The levator and the sphincter muscles are usually normal. There is no hernial sac in this type of prolapse but the mesentery of the sigmoid colon is found between the posterior wall of the sigmoid and the posterior wall of the rectum.

#### Case Report.

A 58 year old Negro male country store keeper closed up his store about 8:30 P. M. and went home. Shortly after arriving home he felt the urge to defecate and went to the bathroom where he strained slightly. He then noted there was blood in the toilet bowl. He put his hand back and felt something large protruding from his anus, about a foot long. He had

no pain at this time but he was frightened by what had happened and he had his family bring him immediately to the emergency ward of the Tuomey Hospital. By the time he arrived, about a half hour later, the protruding mass was causing severe pain and he was having colicky abdominal pains. He gave the history of having been quite constipated for about three weeks, becoming progressively more so and requiring purgatives to move him at all for the last few days. For the past two years he has noticed a slight protrusion at his anus and occasionally noticed passage of a small amount of blood. He had just assumed that he had a return of his piles for which he had been operated about 30 years before. He had recently completed treatment for a urethral stricture.

*Physical Examination:* Well developed and nourished middle aged colored male in acute distress. Findings were negative except in the rectal area.

There is about 14 inches of blue bowel protruding from the anus. At the distal end of this protrusion is a sessile, cauliflower tumor about 2 inches in diameter which is friable and bleeding slightly. Two lumens can be seen in this protruded bowel; one at the center of the distal end and the other surrounding the protruded bowel at the anus. The bowel was quite edematous, cyanotic and hemorrhagic, and could not be reduced at all.

*Clinical Impression:* Carcinoma of the sigmoid with intussusception through the anus and beginning gangrene of intussuscepted bowel.

*Laboratory Work:* Hemoglobin: 11.5 gm./100 ml. Leucocytes 9700 cu. mm. Polys. 58%, Lymphs. 41%, Eosin 1%, Urinalysis: Negative.

The patient had an abdominal and perineal preparation; his blood was typed and cross matched and he was taken directly to the operating room.

#### *Operation*

Under satisfactory general anesthesia a low left rectus incision made. The peritoneal cavity was opened and explored. The liver was normal, no periaortic or mesenteric nodes could be palpated—entirely negative exploration. The sigmoid curve had been straightened out and the descending colon which had taken the place of the sigmoid went through the peritoneal reflection in the pelvis in a straight line. The beginning of the intussusception could not be seen or felt abdominally and all appeared well above the peritoneal reflection. It could be seen that no small intestine had been carried down with the intussusception.

The lateral peritoneum of the descending colon was then incised and the colon was mobilized as much as was possible and a loop colostomy performed. The loop was brought out through the wound, a glass rod passed through the mesentery and the incision closed in layers around the colostomy. A bandage was applied and the patient's legs then put up in stirrups. A little over a foot of large swollen bluish colored bowel was protruding from the anus. When this was pulled down the proximal portion was seen to be normal. An incision was made in the anterior surface of the

outer wall near the anus and it was seen to be viable. The incision was extended transversely and the inner loop of bowel was exposed and seen to be viable. An incision was then made in the anterior wall of the inner loop of bowel and the two anterior walls were then sutured together with a single layer of catgut. The incision in the outer wall was then carried all the way around and the distal portion of the outer loop of bowel was reflected downward and the anastomosis continued out to both angles. The mesentery which had come down with the inner loop was now seen between the two posterior walls. It was clamped, cut, and doubly suture ligated. It was then pushed upward out of the way and the incision in the anterior wall of the inner loop was carried around posteriorly and the specimen of intussuscepted colon with the tumor was removed. The anastomosis was then completed around the posterior walls with a single layer of catgut. The bowel on both sides of the anastomosis was seen to be quite viable although there was considerable edema. Looking at this single layer anastomosis of edematous bowel made me very thankful that I had a proximal diverting colostomy. The anastomosis was then pushed up into the anus and it went back with ease. Digital examination revealed that the anastomosis was about 3 inches above the anus.

The patient returned to the ward in good condition.

Convalescence was uneventful. The colostomy was opened 36 hours after operation and functioned well. The abdominal wound healed primarily without infection and there was no signs of an infection in the pelvis or perirectal region or around the anastomosis. At the time of discharge on the 15th postoperative day, the anastomosis could no longer be felt by digital examination.

The pathologic report was as follows:

"A hemorrhagic and seemingly partly necrotic lower intestinal mass, 18 x 8 x 5 cm., partly telescoped into itself, is received. A fungating, sessile, rough, friable gray-brown mass, 4.5 x 3.5 x 2.5 cm., protrudes into the lumen of the sigmoid colon from a base 3 x 3 cm. at a point 3.5 cm. from the proximal end. On section it extends to the muscular strata but cannot be demonstrated peripherad. Most of the intestinal wall is dark green-black-brown in color, but appears viable at the planes of resection. In the hemorrhagic mesosigmoid only one node, largely hemorrhagic, can be identified.

*Microscopic Description:* The sessile mass is a low grade adenocarcinoma, with apparent secondary exudative infection. No invasion of the muscular strata is demonstrated. The discolored wall is hemorrhagic and partly necrotic. The lymph node is somewhat hemorrhagic.

*Pathological Diagnosis:* Adenocarcinoma of sigmoid colon, grade 1, with intussusception into rectum and partial hemorrhagic gangrene."

Two months later patient was examined with the sigmoidoscope. The sigmoidoscope passed into the sigmoid with ease. The anastomotic site could not be definitely identified. A barium enema was also done and was entirely negative. The patient was then re-

admitted and the colostomy closed. The abdominal wound healed well and he began having normal bowel movements per rectum. When last seen he had returned to work and had no complaints. There was no evidence of prolapse or protrusion of his rectum through his anus.

#### Comment

It is important to differentiate between a complete prolapse of the rectum and a prolapsed sigmoidorectal intussusception because the treatment of the two conditions is different. As was seen in this case there was no weakness of the pelvic floor or sphincters and it was not necessary to repair them. In this instance the bowel had to be resected for two reasons: (1) the carcinoma, and (2) it was infarcted. If these conditions had not existed and the intussusception could have been reduced from above, then theoretically a Moschowitz type procedure would be all that would have to be done to effect a cure. On the other hand treatment of a complete rectal prolapse poses other problems. Judging from the number of different operations in use for this condition, none of them is entirely satisfactory in all cases. In general, treatment consists of (1) resecting the prolapsed bowel or suspension and fixation from above; plus (2) obliteration of the cul-de-sac if done from above or ligation

and removal of the hernial sac if done from below; and (3) restoration of the pelvic floor.<sup>3</sup>

The so-called Mont Reid procedure<sup>2</sup> or strangulation of the prolapsed segment by heavy silk ligatures over a large intraluminal rubber tube is mentioned only to be condemned. It is dangerous in a rectal prolapse because of the possibility of including some small bowel which may have herniated into the cul-de-sac of Douglas. The vessels of the sigmoid mesentery which comes down with an intussusception are too large to be dealt with in this fashion and delayed hemorrhage is a very real possibility.

#### Summary

A case of intussusception of a carcinoma of the sigmoid through the anus is presented. The important differences in the diagnosis and treatment of a prolapsed sigmoidorectal intussusception and a complete prolapse of the rectum are briefly discussed.

#### REFERENCES

- (1) David, V., & Gilchrist, R. R.: *Lewis' Practice of Surgery*, Vol. VII Chapter 6, W. F. Prior Co., Inc., Hagerstown, Md.
- (2) Reid, M. R.: Irreducible prolapse of the rectum, *Am. J. Surg.* 20: 359, 1933.
- (3) Shackelford, R. T.: *Surgery of the Alimentary Tract*; Vol. 3, Chapter 10, W. B. Saunders Co., Philadelphia, Pa.

---

*Primary Mediastinal Tumors.* Joseph Hodge, M. D. (Spartanburg), Gonzales Aponte and Edward McLaughlin, *Thoracic Surg.*, 37:730, June, 1959.

This is a study of 42 primary mediastinal tumors and classified on the basis of pathologic types in specific anatomical locations.

There were 18 thymomas (43%), 11 neurogenic tumors (26%) and 8 teratomas and dermoid cysts (19%). Bronchial cyst, hamartoma, lipoma and pericardial cyst accounted for the remainder of the group reported.

Thymomas comprised the most frequent tumor; 14 were malignant and 4 benign. Myasthenia gravis was associated with two benign cases and one malignant lymphosarcomatous type. The lymphocytic—lymphoepithelioma varieties were the pathologic types most often encountered. Dyspnea, cough, and chest pain were the chief complaints in over 60 per cent of the patients. Thoracotomy and excision was done in 14 and median sternotomy was the approach utilized in four patients.

Neurogenic tumors were predominantly in the paravertebral area of the posterior mediastinum and over 90 per cent were benign, neurofibroma being the most common type. A clinical history of chest

pain, dyspnea, with roentgenographic evidence of lobulated or round mass in the posterior or upper mediastinum is highly suggestive of a neurogenic tumor. Thoracotomy and excision was successfully performed in over 90 per cent of the cases.

The majority of teratoid tumors and cysts were treated by thoracotomy and excision. An opacity in the anterior part of the superior or middle mediastinum that contains bone, hair, teeth on chest x-ray examination establishes the diagnosis.

Of the incidental tumors, the presence of a round opaque shadow in the cardiophrenic angle adjacent to or adherent to the pericardium, pleura and diaphragm is compatible with the diagnosis of pericardial cyst.

Hamartoma may be suspected if the roentgenogram demonstrates a dense mass surrounded by normal pulmonary tissue and exhibiting sharp, lobulated borders with areas of calcification. Thoracotomy and excision were performed for the incidental mediastinal tumors, but a left upper lobectomy was done for the hamartoma reported. Of the total group of 42 cases, thoracotomy and excision was successfully performed in 36 cases.



# MANAGEMENT OF MALIGNANT BLOOD DISEASES WITH COMPOUND E39

JOHN R. SAMPEY, PH. D.  
Greenville, S. C.

Ethyleniminobenzoquinone (Bayer E39) is one of the more promising of the newer chemotherapeutic agents in the control of chronic blood malignancies.\* The number of patients treated to date with E39 is too limited to have statistical significance, but the number of remissions observed in the score of clinical reports reviewed in this study are exciting enough to stimulate an increasing number of investigations. It will be noted that one-half of the papers cited were published only last year.

*Hodgkin's Disease.* Bayer E39 has been given more extensive clinical trials in the control of Hodgkin's Disease than with any other malignant blood disorder. Bernard<sup>1</sup> described 2 complete and 3 fair remissions in 13 patients on E39 therapy, and Meythaler<sup>11,12</sup> reported 3 objective and 3 subjective improvements in 8 patients on E39 (2,5-bis-n-propoxyethyleniminobenzoquinone), Bayer A139 (2,5-bis-methoxyethylquinone) and sanamycin. Olmer<sup>15</sup> treated 8 reticulosos (Hodgkin's and reticulosarcomas) with E39, and noted one complete and 7 partial remissions, but he warned of the danger of hemorrhages following the use of this drug. Consoli<sup>3</sup> found 4 Hodgkin's Disease responded well to E39 therapy, while Zaimi<sup>22</sup> observed only fair clinical response in 3 cases. Bramezza<sup>2</sup> gave the histopathological changes in 2 patients subsequent to E39 treatment, and Cozzi<sup>4</sup> termed the response of two patients to this drug as satisfactory. Rosa<sup>17</sup>, however, found only one fair response in 3 patients, and DiPietro<sup>5</sup> claimed only brief improvement in 2 other patients on E39, while Varga<sup>21</sup> noted one patient with Hodgkin's had a good remission but that one with lymphosarcoma found the therapy aggravated his condition.

*Chronic Lymphocytic Leukemia.* Clinical

reports on E39 therapy of chronic lymphoid leukemia are almost as numerous as those on Hodgkin's disease. Bernard<sup>1</sup> recorded 4 complete and 6 partial clinical and hematological remissions lasting to 12 months in 12 patients. In 1957 Meythaler<sup>11</sup> noted that most of 9 lymphoid leukemia patients had some hematic remissions, but the next year<sup>12</sup> he observed favorable response in only 2 of 9 cases. Jansen<sup>8</sup> employed E39 or A139 to induce 20 remissions in 21 chronic leukemia cases (10 lymphatic and 11 myeloid). Kleinfelder<sup>10</sup> described 2 good and 2 fair hematologic responses in 4 chronic lymphocytic leukemia patients on E39. Olmer<sup>15</sup> recorded one of 2 patients had a good clinical response to E39, but DiPietro<sup>5</sup> judged a negative response in one lymphoid leukemia case on this therapy. Shanbrom<sup>20</sup> tabulated good clinical and hematologic remissions in chronic lymphocytic leukemia following E39 administration.

*Chronic Myelocytic Leukemia.* Attention has already been directed to remissions in 11 patients with myeloid leukemia who were on E39 and A139 therapy.<sup>8</sup> Bernard<sup>1</sup> reported 3 complete and 4 partial remissions in 10 chronic myelocytic leukemias with this ethyleniminobenzoquinone, E39, and Kleinfelder<sup>10</sup> noted 3 good hematic responses in 3 patients. Meythaler<sup>11</sup> reported good remissions in 2 of 3 patients with myeloid leukemia, which lasted 2 months. Ravina<sup>16</sup> found E39 had no effect on one case of myeloid leukemia.

*Lymphosarcoma.* Lymphosarcomas have been the most responsive of the lymphomas to E39 therapy. Bernard<sup>1</sup> recorded 10 of 11 lymphosarcoma cases that responded to this chemical, and DiPietro<sup>5</sup> described 2 of 3 cases having brief remissions with E39. Herrmann,<sup>7</sup> however, considered the drug overrated, for 2 patients with lymphosarcoma and 2 with reticulumcell sarcoma showed little benefit. Rosa<sup>17</sup> and Schwermer<sup>19</sup> both reported fair improvement in one case each after use of E39. Jauneau<sup>9</sup> wrote of 2 good remissions with

Furman University, Greenville, South Carolina.

\*Southern, J. A. and Sampey, J. R., Paper read at the Southeastern Regional Meeting, American Chemical Society, University of Florida, December 1958.

E39, one lasting 6 months, and one patient was in excellent condition at the time of reporting. Kleinfelder<sup>10</sup> claimed little response in one case, and Moulinier<sup>14</sup> judged the results in another case as negative, while Verga<sup>21</sup> stated the action of the drug was contraindicated in one patient.

*Miscellaneous Blood Disorders.* E39 has been employed in the management of several reticuloses. Bernard<sup>1</sup> recorded 6 of 12 responses as favorable in patients with reticulocell sarcoma. Rosa<sup>17,18</sup> in two reports described good responses in 2 of 3 patients with reticulosarcomas. Herrmann,<sup>7</sup> Jauneau,<sup>9</sup> and Kleinfelder<sup>10</sup> all reported little improvement in patients with reticuloses following E39 therapy. Olmer's<sup>15</sup> observations on remissions observed in Hodgkin's disease and reticulum-cell sarcoma have already been noted.

Shanbrom<sup>20</sup> reported variable responses in 7 patients with acute leukemia who were given E39, and Rosa<sup>17</sup> recorded no response in 2 other cases. Bernard<sup>1</sup> stated that one patient with monocytic leukemia had a fair response with E39, but that a second grew worse on the therapy, while Kleinfelder<sup>10</sup> ob-

observed little response in one patient. Shanbrom<sup>20</sup> reported that E39 induced the best remissions in chronic granulocytic leukemia observed in any of the chronic leukemias. Ravina<sup>16</sup> described some improvements in a patient with mycosis fungoides after administration of the drug, but Bernard<sup>1</sup> found no effect in 2 cases. E39 was not satisfactory in 4 patients with multiple myeloma<sup>1,20</sup> but Heilmann<sup>6</sup> reported good objective improvement in 2 patients with plasmocytoma after E39 therapy.

*Summary.* The 42 remissions in 62 reticuloses (Hodgkin's disease and reticulumcell sarcoma), the 58 remissions in 75 chronic lymphocytic and myelocytic leukemias, and the 16 remissions in 23 lymphosarcoma patients reviewed in this study compare favorably with the best of the older forms of therapy of these malignancies. On the other hand, acute leukemia, multiple myeloma, and mycosis fungoides responded poorly to E39 therapy.

*Acknowledgments.* The original literature was made available by the National Library of Medicine, and the libraries of Furman University and Greenville General Hospital.

## REFERENCES

1. Bernard, J., Mathé, G. and Weil, M.: [Therapy of chronic blood malignancies and other tumors by E 39.] *Rev. franc. études clin. et biol.* 2:920, 1957.
2. Bramezza, M. and Cozzi, P. A.: [Histopathological data on Bayer E 39 in malignant lymphogranuloma.] *Friuli med.* 12:548, 1957.
3. Consoli, G. and Russo, N.: [Clinical observations on the use of the compound E 39 in anticellular chemotherapy.] *Riforma med.* 71:624, 1957.
4. Cozzi, P. A.: [Preliminary results with cytostatic E 39 in therapy of malignant tumors.] *Friuli med.* 12:509, 1957.
5. Di Pietro, S.: [Clinical experiences with ethyleneimino-quinone (E 39) in chemotherapy of diffuse neoplasms.] *Riforma med.* 71:608, 1957.
6. Heilmann, D.: [Preliminary report on therapy of plasmocytoma with an ethyleneimino-quinone preparation (Bayer E 39).] *Deutsches med. J.* 8: 565, 1957.
7. Herrmann, A.: [Experimental and clinical results of cytotoxic therapy of malignant tumors, with special reference to sarcoma.] *Munchen. med. Wehnschr.* 99:1233, 1957.
8. Jansen, L.: [Therapy of chronic leukemia with ethyleniminobenzoquinone.] *Arztl. Wehnschr.* 13: 361, 1958.
9. Jauneau, A.: [E 39 in sarcomatosis.] *Bull. Soc. méd. mil. franc.* 52:201, 1958.
10. Kleinfelder, H., Gebert, E., and Reisert, P.: [Therapy of tumors and hemoblastoses with ethyleneiminoquinone.] *Deutsche med. Wehnschr.* 83: 413, 422, 1958.
11. Meythaler, F. and Weiler, K.: [Cytostatic therapy of malignant tumors and blood system diseases.] *Strahlentherapie Sonderbd.* 37:241, 1957.
12. Meythaler, F. and Weiler, K.: [Cytostatic therapy of malignant tumors and diseases of the hemopoietic system.] *Deutsche med. Wehnschr.* 83: 172, 1958.
13. Meythaler, F. and Hegelein, H.: [Contribution to the cytostatic therapy of leukemia with Bayer E 39.] *Deutsches med. J.* 9:297, 1958.
14. Moulinier, J.: [Failure of attempted therapy of multiregional lymphosarcomatosis with quinone E 39.] *J. méd. Bordeaux* 134:953, 1957.
15. Olmer, J.: [Early clinical trials with ethylene-quinone, E 39.] *Marseille-méd.* 94:499, 1957.
16. Ravina, A. and Pestel, M.: [Cytotoxic drugs and malignant tumors; action of triethylenic melamine, of diethylene-dipropoxy-benzoquinone (E 39) and thiophosphoramidate.] *Presse méd.* 66:371, 1958).
17. Rosa, L., Giungi, F. and Franco, T.: [Preliminary report on use of a new cytostatic drug in tumor therapy.] *Riforma med.* 71:619, 1957.
18. Rosa, L. and Giungi, F.: [Temporary regressions of skin metastases due to reticulosarcoma in therapy with Bayer E 39.] *Riforma med.* 71:621, 1957.
19. Schwermer, B. and Schreiber, H. W.: [Cytostatic

- therapy of malignant tumors with alcoxyethyl-eneiminobenzoquinone; Bayer E 39.] *Deutsche med. Wchnschr.* 83:331, 1958.
20. Shanbrom, E. and Miller, S. P.: Clinical experience with E 39 in neoplastic disorders. *Proc. Am. A. Cancer Res.* 2:345, 1958.
21. Verga, P. and Perrone, V.: [First results with cytostatic drug Bayer E 39.] *Riforma med.* 71:604, 1957.
22. Zaimi, A., Ben Abdallah, T. and Legros, N.: [Favorable development of Hodgkin's disease on E 39 therapy.] *Tunisie méd.* 36:331, 1958.

## THE NEGROES OF CHARLESTON A STUDY OF HEMOGLOBIN TYPES, SEROLOGY, AND MORPHOLOGY

W. S. POLLITZER\*

The Gullah Negroes of lower South Carolina have long been recognized as a unique population whose speech and culture have attracted wide interest. Samuel G. Stoney and others have popularized the special accent and idiom, and their songs have been preserved with care. The linguist Turner claimed that hundreds of words and much of the syntax of the Gullah dialect show evidence of kinship to West African languages, and the survival of magic and religious practices along the sea-islands have been viewed as further evidence of their cultural proximity to their land of origin. Switzer's excellent studies showed that the coastal Carolina Negro has nearly twice the incidence of sickle-cell trait as Negroes elsewhere in the United States.

How do the Negroes of lower coastal Carolina compare biologically with those of West Africa and with other American Negroes? In recent years students of racial classification have debated the relative merits of the conventional or "morphological" methods and the newer "genetical" methods. The customary approach of physical anthropologists has utilized such observations as skin color, hair form, and head measurements. But the geneticists, conceiving of a race as a group of people having many genes in common due to common ancestry, have regarded the frequency of single-gene traits like the blood types as the best measure of the degree of kinship.

The Gullah Negroes provide an excellent opportunity not only to ascertain distance from

parental stocks, but also to test the methods of analysis and to explore the evolutionary factors which may account for their biological position.

In defining the African parental stock, it is extremely fortunate that the record of slave importations is more complete for Charleston than for any other port of entry in the continental United States. In her comprehensive study based on newspaper advertisements, Donnan lists 72,877 slaves imported from 1733 through 1807. Omitting the small numbers from the West Indies and a few indefinite regions, the slave traffic may be grouped into six areas, whose percentage contribution is as follows: Senegambia (20), Windward Coast (23), Gold Coast (13), Whydah-Bennin-Calabar (4), Congo (17), and Angola (23). On the rice and cotton plantations of coastal Carolina the Negroes were blended into large and relatively isolated communities where they vastly outnumbered whites. This situation shaped the typical Gullah culture and may have influenced the biology as well. As Negro migration into the coastal area since the end of the slave trade has been negligible, it appears highly probable that the Negro of the area today is the descendent of the African regions indicated.

Subjects were obtained through the "colored" clinics of the Medical College of South Carolina, in Charleston, chiefly obstetrics, medicine, and less frequently orthopedics; a few came from surgery and gynecology wards of the affiliated Roper Hospital. The sample consists of 479 women and only 57 men with an age range from 14 to 79. For

\*Department of Anatomy, Medical School, University of North Carolina, Chapel Hill, N. C.



blood studies all age groups were included; for morphology, only those 18 and above. Among females the 18 to 30 age group constituted almost half of the total.

Of the 513 subjects reporting birthplace, one-third were born in the city of Charleston, over two-thirds within the county of Charleston, and almost 95% within the coastal tier of counties in South Carolina considered the land of the Gullah Negro. Of the parents whose birthplace was known to the subject, 11% were natives of the city, 60% were natives of the county, and 85% were from the coastal strip. It thus appears highly likely that the vast majority of subjects studied are geographically representative of the Gullah Negro. Of the subjects who reported on the birthplace of their parents, 46% named the same place for father, mother, and self. On the average the distance between the birthplace of the father and that of the mother was 25 miles; and in 73% of the cases, the two parents were born within ten miles of each other. These figures suggest that the coastal Negro of recent decades neither forms small breeding isolates nor wanders afar in search of his mate.

The method of analysis of hemoglobin followed the electrophoretic techniques of Larson and Ranney ('53), which differentiate among normal (AA), sickle cell (SS), and C (CC) hemoglobin, and any combinations of them (AS, AC, and SC). Results of the survey are presented in table 1. The high incidence of hemoglobin S is slightly above the 13.6% sickling incidence which Switzer ('48, '50) found by wet smear studies of 4066 Negroes of the area. As shown in table 2 the Charleston gene frequencies are remarkably close to those of Africa. Wet smear determinations yield results similar to electrophoretic studies.

In view of Allison's ('54) hypothesis that falciparum malaria has an effect in maintain-

ing the frequency of the sickle cell gene, it is noteworthy that the lower Carolina region has known malaria in endemic proportions since colonization in the late seventeenth century (Childs, '40). Although the disease is virtually non-existent today, as recently as 1937-44 McDaniel found among 58,658 Negro school children in 23 coastal counties, 2219 positive malarial smears, of which 1840 were falciparum. Although the extent of falciparum infection in the distant past cannot be determined, the large number of known deaths from malaria in general plus the high incidence in school children cited above suggest that it has been of prime importance in the Carolina

TABLE 2  
Comparison of Hemoglobin in Four Populations

Gene	West Africa	Charleston	U. S. Negro	White
A	898	904	937	1,000
S	084	080	050	000
C	018	016	013	000
% Sickling	15.8	13.6	7.3	0.0
% Sickling calculated from gene frequencies	16.6	15.5	9.6	0.0

low country. As the abnormal hemoglobin genes may have been thus influenced by selection, they will not be averaged in with the serological genes in the determination of biological distance which is to follow.

One significant finding of the present study is the age distribution of subjects with abnormal hemoglobins, as revealed in table 3.

TABLE 3  
Association of Hemoglobin and Age in Charleston  
Sample  
(Both Sexes)

AGE	AA	AS	AC	TOTAL
14 - 29				
Number	181	42	9	232
Percent	78	18	4	100
30 and up				
Number	210	26	5	241
Percent	87	11	2	100
TOTAL NUMBER	391	68	14	473

Chi-square, 2 d.f. = 6.81  
p = .033

Subjects under 30 have almost twice the frequency of abnormal hemoglobins of those over 30. If the heterozygous sickle cell hemoglobin confers a selective advantage it is difficult to explain this marked differential. Is it possible that the virtual disappearance of malaria in recent decades has destroyed the advantage

TABLE 1 Distribution of Hemoglobin Types in Charleston Sample		
HEMOGLOBIN	NUMBER	FREQUENCY
AA	393	.814
AS	73	.151
SS	2	.004
AC	14	.029
CC	1	.002
SC	0	.000
TOTAL	483	1.000

of the heterozygote and even reduced it in viability to a level below that of the normals? Whatever factor is operative apparently effects both S and C hemoglobin.

ABO, Rh, MN, Henshaw, Duffy, and Kell blood factors were utilized in the analysis of genetical distance, after the observations were reduced to gene frequencies. Comparison of the Charleston sample with data from West Africa, American Negroes, and Whites shows a gradation, with Charleston intermediate between the African and American Negro populations. For example the highly negroid Rho gene frequency is .586 in West Africa, .558 in Charleston, .465 in the U. S. Negro, and .023 in Whites. Sanghvi's chi-square test of the blood type genes was used to compute the degree of dissimilarity between the populations.

Morphological traits employed were skin color, nose and face width, lip thickness, prognathism, and sitting and standing heights. Again a gradient between the four populations could be detected in most of these physical features. The generalized distance, or  $D^2$ , of Mahalanobis was used to compute morphological dissimilarity.

As indicated in table 4, the blood types and the morphology yield similar pictures. Both methods suggest that the Gullah Negro is appreciably closer to his African ancestors than are most American Negroes.

TABLE 4  
Comparison of Morphological and Serological Distances Based on Mean Units of Square Root Values

	Morphological	Serological
White — Africa	1.72	1.70
White — Charleston	1.53	1.59
White — U. S. Negro	1.01	1.31
U. S. Negro — Africa	.75	.61
U. S. Negro — Charleston	.54	.44
Charleston — Africa	.44	.35

On the basis of morphological and serological findings the Charleston Negro has been compared with the West African Negro, the American Negro, and the Whites to determine the degree of similarity among them. What biological meaning can be assigned to the distance thus computed? In theory the blood type frequencies, dependent upon single genes inherited in a known Mendelian manner, fully expressed, and not subject to en-

vironmental modification *within the individual*, should be perfect indicators of the degree of affinity. Such genes, especially those showing wide variations in frequency among the populations considered, appear to be ideal for the modern genetic concept of race. Yet the monogenetic nature of the blood type genes permits them to be readily affected by random fluctuations and sampling error. The same frequency of a gene may occur in diverse and obviously unrelated people, while groups as closely akin as two North American Indian tribes may show a striking difference. Only recently has a start been made in unravelling the possible role of selection in the blood types. Other major drawbacks to the genetical approach at the present time are the complexities of technique and the rather few "gene" traits known which occur in suitably high frequencies. Nevertheless, a large number of blood factors should yield a fairly accurate measure of biological relationship, especially where adequately supported by data from such other disciplines as history, archeology, or physical anthropology. The totalled Chi-square calculations based on serology may be considered a reasonable approximation to genetic kinship among the populations involved.

The morphological traits present a different kind of problem. In addition to the difficulty of precise measurement, no simple pattern of inheritance is known for these polygenic traits. Many if not all are subject to environmental modification *within the individual*, skin color, hair color, and hair form being especially malleable. Selections through many millenia probably plays the major role in the formation of most such racial traits; chance fluctuations should wield relatively little influence. In the absence of known artificial deformation or time enough for appreciable natural selection, morphology should yield a reasonably accurate index of relationship. The generalized distance, allowing for intercorrelations and range of variation of the traits, should provide the best estimate.

Satisfactory agreement of the two methods is indicated by the present study.

The major evolutionary factor most likely responsible for the biological positions of the

populations appears to be hybridization between West Africans and Whites. This phenomenon is indicated by the gradation in serological and morphological factors. The implication of the data is that, although both intermediate groups have undergone admixture with Whites, the Negroes of Charleston have received far less White genes than Negroes elsewhere in the country. That the average American Negro shows evidence of significant admixture is known from the studies of Herskovits ('30) in morphology and genealogy and those of Glass ('55) in genetics. Coon, Garn, and Birdsell ('50) even consider them distinct enough to be called a separate "race".

Why should the Gullah Negro have less genetic contribution from Whites than those Negroes elsewhere in the United States? The ratio of the races on the low-country plantations may provide one answer. Just as the social situation molded the language and culture characteristic of the Gullah Negro, it may have played a dominant role in shaping the physical man as well. Besides offering less opportunity for mixture, the social situation probably created a psychological factor opposing it. Wherever Negroes are in close association with a dominant White society in large numbers, White physical traits seem to be held at a premium. Those Negroes with indications of Caucasian admixture have greater opportunities for transmitting their genes. But in isolates composed overwhelmingly of distinctly Negroid individuals a sense of social cohesion develops which militates against those showing signs of admixture. Mate selection, operating on visible traits, might be strong enough to discourage miscegenation or to lead to the migration of hybrids away from the area. Although documentary proof is lacking, it is likely that such a mechanism has had significant influence among the Negroes long isolated in the coastal counties of lower South Carolina.

The Charleston Negroes are not only nearer to Africa biologically; they are also somewhat removed from the African-White axis relative to the general American Negro. This fact suggests that somewhat different parental stocks may have fused in the formation of the

Negroes of Charleston and those elsewhere in the United States. The provenances of Negroes brought to America, other than to Charleston, is inadequately known. Areas to the south and east in Africa were apparently engaged in the slave trade, especially in the illegal operations following 1808. Even within West Africa the relative contribution of tribes to the Gullahs may have differed significantly from that to other Negroes of America. The White component which fused with the Negro may also have varied appreciably in different parts of America.

The question of Indian admixture with the American Negro has been raised by Herskovits ('30) and by Glass ('55). The former, basing his argument chiefly on genealogy, suggests a significant degree of Indian contribution to the amalgam. The latter, relying primarily upon the serological genes, concludes that the Indian flow has been virtually negligible. In frontier days many opportunities existed for miscegenation, and a few communities of today bear witness to such racial fusion. Some physical and verbal evidence for Indian admixture came to the author's attention during a survey of the sea-island area of Georgia. Although Indian gene frequencies in general (as reported by Mourant, '54) are compatible with the theory that that race did contribute genes to the American Negro, too little information is available for a precise statement of the degree of Indian influence. Serological studies are almost entirely of tribes beyond the range of possible fusion with Negroes, and these exhibit wide variability.

As the difference in degree of admixture and in ancestral stocks may not be the sole explanation of the divergence of Charleston from other American Negroes, other evolutionary factors should be considered. Could natural selection produce significant differences in the two hybrid populations? It is difficult to conceive of environmental agents, differing between coastal Carolina and the rest of the nation, potent enough to create detectable differences in a mere dozen generations. The relative isolation of the Gullah Negroes on large plantations through one or two centuries appears to offer an ideal situation for the operation of genetic drift. Until recent decades



the vast majority of the native Negroes of the coastal strip probably spent their entire lives within a few miles of their birthplace. But any random fluctuations in gene frequencies thus produced should tend in varying directions within any small isolate. The 25-mile average distance between birthplace of the subject's parents in the present sample suggests that any deviations produced in the isolates of the past would be cancelled out in the formation of the larger gene pools of recent generations. It therefore appears likely that neither natural selection nor genetic drift has played an appreciable role in the biological position of the Charleston Negro.

#### Summary

Data have been presented on approximately 500 Gullah Negroes of the Charleston, South Carolina, vicinity. Comparisons have been made with natives of West Africa, average American Negroes, and Whites. Values for abnormal hemoglobin in the Charleston sample are close to African ones and may have been maintained at this high level through the action of falciparum malaria. The degree of similarity between Negroes of Charleston and

other populations has been analyzed by two methods: Sanghvi's Chi-square of the gene frequencies for blood types and Mahalanobis' generalized distance for the morphological traits. Results of the methods are quite similar; both show that the Charleston Negro is distinct from, and closer to Africans than, the general American Negro. Hybridization to a lower degree appears to be the major cause of the biological position noted.

*Notes:* The present article is a condensation of one appearing in the *American Journal of Physical Anthropology*, 16:241, (June, 1958.) Figures for West Africa obtained from the literature were arranged first by sample size within each slave-trade region and then by the per cent contribution of that region to the Charleston importation. Blood type figures for Whites are based on English data. All figures and their literature references are available from the author. A list of articles cited appears with the original paper noted above. Permission for publication of this revised version has been obtained from the editor.

*Acknowledgments:* In addition to the help of his Columbia University professors, the author is deeply grateful to Drs. Knisely, Hester, Moseley, Siegling, McCord and their staffs at the Medical College of South Carolina, and the cooperative nurses, students, and patients there for making this study possible.

---

*Perforation of Dura by A Plastic Catheter During Continuous Caudal Anesthesia.* Hamelberg, Wm., (Charleston), Siddall, J., and Claassen, L. A.M.A. Arch. Surg. 78:357 (Feb. 1959)

A case report is presented in which a plastic catheter placed in the caudal canal inadvertently pierced the dura, and as a result, high spinal anesthesia occurred. This particular technique of anesthesia was chosen because of the general physical condition of the patient. Prompt resuscitative measures, including artificial ventilation with oxygen and intravenous vasopressors, prevented a fatal outcome of this particular complication.

A discussion is presented, emphasizing the precautions to be taken when utilizing this technique of anesthesia and the means of treating complications if they should arise.

*Skin-Marking Technique*—John van de Erve. Charleston. AMA Arch. Derm. 79:244, Feb. 1959.

A simple, safe, easy and long-lasting method of marking the skin is described. Tamerin and Bornstein (1950) used the same method for outlining varicose veins before surgery.

An interest in oil painting led to the use of the felt nib pen such as artists use. The ink is an oil-based aniline dye. On the skin it is waterproof and lasts for two to five days, depending on sweating and on friction from clothing.

In four hundred patients, no sensitivity reactions were found.

The Flo-Master Hospital Marking Pens and the Marsh 77 Felt-Point pen were used and found satisfactory.

John van de Erve

# THE TREATMENT OF DERMATOSES WITH TOPICAL FLUOROMETHALONE ALONE AND IN COMBINATION WITH NEOMYCIN\*

JOEL W. WYMAN, M. D.  
Anderson, South Carolina

Although excellent results are obtained in the treatment of dermatoses with topical preparations of hydrocortisone, the physician is often concerned about the possibility of the occurrence of systemic side effects secondary to the absorption of this steroid by the skin and mucous membranes. Such absorption does occur, and it has been reported to cause systemic side effects,<sup>1-3</sup> Other newer adrenal steroids have proved to be topically effective in lower doses;<sup>4-8</sup> but the effective systemic dose is also lower than that of hydrocortisone—and to the same degree. For these reasons, the development of fluoromethalone (Oxylone) is of interest.

Systemically, the anti-inflammatory activity of Oxylone is only one to three times that of hydrocortisone; whereas it has been demonstrated to have forty times the activity of hydrocortisone when applied topically. This division between local and systemic activity is an important advance, since it allows topical treatment theoretically equivalent to treatment with 1% hydrocortisone with an amount of material having a possible systemic effect of only one-thirteenth to one-fortieth that of an equal amount of 1% hydrocortisone.

The purpose of this paper is to record data obtained in a clinical study comparing the results of treatment of various dermatoses with .025% Oxylone and 1% hydrocortisone. In some instances the steroids were in a cream base; in others, they were in an ointment base and were combined with neomycin (5 mg. per gram). As the concentration of Oxylone was one-fortieth that of the concentration of hydrocortisone in the preparations used, it was expected on theoretical grounds that the results would be similar.

## Materials and Methods

Thirty-two patients with 20 skin diseases

\*Supplied as Oxylone Cream and Neo-Oxylone Ointment by The Upjohn Company, Kalamazoo, Michigan.

were treated with .025% Oxylone cream. Sixty-five patients with 26 skin diseases were treated with .025% Oxylone-Neomycin ointment. Where symmetrical lesions existed, 1% hydrocortisone cream or 1% hydrocortisone-neomycin ointment was used concurrently. Otherwise, treatment with one compound followed treatment with the other. In a few instances, where neither of these alternatives was available, comparison with 1% hydrocortisone was based on prior experience.

The response to treatment was graded as "excellent" when the lesion completely disappeared, "good" when there was considerable improvement in the lesion, "fair" when slight improvement occurred, and "poor" when there was no apparent change following treatment. Comparison with 1% hydrocortisone was based on objective and subjective responses to treatment.

## Results

In 31 cases, .025% Oxylone cream was equal to 1% hydrocortisone and in one case superior. (See table 1.) In 60 cases, .025% Oxylone-Neomycin ointment was equal to 1% hydrocortisone-neomycin ointment, in 2 cases less effective, and in 3 cases superior. (See table 2.)

Treatment failures ("fair" or "poor") with Oxylone-Neomycin ointment occurred in 2 patients, who derived more benefit from hydrocortisone-neomycin ointment. Each of these patients had neurodermatitis. As recorded in the tables, 4 other patients with this disease responded satisfactorily to Oxylone; and in the one instance where Oxylone cream was used, it was superior to hydrocortisone.

## Summary and Conclusion

Ninety-seven patients with various dermatoses were treated topically with fluoromethalone, an adrenal steroid having a

TABLE 1. RESULTS OF TREATMENT OF DERMATOSES WITH  
0.025% OXYLONE CREAM

Disease	No. Pts.	Duration of Treatment	Excellent	Results			Comparison with 1% Hydrocortisone Cream		
				Good	Fair	Poor	Superior	Equal	Inferior
Allergic Dermatitis	7	1 wk.-3 mos.		5		2		7	
Contact Dermatitis	8	4 dys.-6 wks.	1	7				8	
Drug Eruption	1	2 wks.	1					1	
Eczematous Dermatitis	1	6 wks.	1					1	
Epidermolysis Bullosa	1	2 wks.		1				1	
Folliculitis	1	1 wk.	1					1	
Fungus Infection	1	3 wks.		1				1	
Neurodermatitis	3	1 wk.-6 wks.	2		1		1	2	
Neurotic Excoriations	1	2 wks.		1				1	
Pruritus	4	4 wks.-8 wks.		4				4	
Seborrheic Dermatitis	1	2 wks.		1				1	
Varicose Eczema	3	4 wks.-2 mos.		3				3	
TOTALS	32		6	23	1	2	1	31	

TABLE 2. RESULTS OF TREATMENT OF DERMATOSES WITH  
0.025% OXYLONE-NEOMYCIN OINTMENT

Disease	No. Pts.	Duration of Treatment	Excellent	Results			Comparison with 1% Hydrocortisone-Neo- mycin Ointment		
				Good	Fair	Poor	Superior	Equal	Inferior
Atopic Eczema	5	1 wk.-1 mo.		4		1		5	
Contact Dermatitis	11	1 wk.-5 mos.	1	10			1	10	
Eczematous Dermatitis	9	1 wk.-6 wks.	1	8			1	8	
Erythema, atopic	1	1 wk.			1			1	
Fungus with id and sensitivity to medication	1	1 wk.		1				1	
Hand Dermatitis	5	1 wk.-3 wks.		5				5	
Insect bites	1	1 wk.		1				1	
Irritation	3	1 wk.-2 wks.		3				3	
Keratosis	1	2 wks.		1				1	
Neurodermatitis	16	1 wk.-3 mos.	1	13	1	1		14	2
Otitis Externa	1	2 wks.		1				1	
Pruritus Vulvae	1	2 mos.		1			1		
Psoriasis	1	2 wks.				1		1	
Seborrheic Dermatitis	6	1 wk.-3 wks.		6				6	
Senile Keratoses	1	3 wks.		1				1	
Varicose Eczema	2	3 wks.-8 wks.		2				2	
TOTALS	65		3	57	2	3	3	60	2



pronounced topical effect and little systemic effect. Fluoromethalone .025% was used alone and in combination with neomycin. The results were compared with those following

the topical use of 1% hydrocortisone in similar combinations.

It is concluded that fluoromethalone .025% is as effective topically as hydrocortisone 1%.

#### REFERENCES

1. Kile, R. L.: Use of steroids in dermatology. Clin. Med. 5:923, 1958.
2. Scott, A., Kalz, F.: The penetration and distribution of C<sup>14</sup>-hydrocortisone in human skin after its topical application. J. Invest. Dermat. 26:149, 1956.
3. Sulzberger, M. B., Witten, V. H., Smith, C. C.: Hydrocortisone (Compound F) acetate ointment in dermatological therapy. J.A.M.A. 151:468, 1953.
4. Schamberg, I. L., Askovitz, S. I., Greenberg, M.: A critical evaluation of the effect of steroid lotions on inflammatory dermatoses. A.M.A. Arch. Dermat. 78:490, 1958.
5. Crowe, F. W., Fitzpatrick, T. B., Walker, S. A., Olson, R.: Topical application of a new derivative of triamcinolone in the treatment of skin diseases. J. Invest. Dermat. 31:297, 1958.
6. Smith, J. G., Jr., Zawisza, R. J., Blank, H.: Triamcinolone acetonide — a highly effective new topical steroid. A.M.A. Arch. Dermat. 78:643, 1958.
7. Robinson, H. M., Jr., Robinson, R. C. V., Raskin, J.: Triamcinolone in dermatologic therapy. South. M. J. 52:330, 1959.
8. Grayson, L. D., Shair, H. M.: Topical use of methyl prednisolone in various dermatoses. Am. Pract. & Digest Treat. 10:632, 1959.

## THE GREENVILLE COUNTY MEDICAL SOCIETY HISTORICAL SKETCHES

### V THE PAUSE BETWEEN TWO WARS

J. DECHERD GUESS, M. D.

This is the fifth of a series of articles, adapted from the book *A Medical History of Greenville, South Carolina*, written by the same author, and which will be published by the Greenville County Medical Society in 1959.

Greenville was the home of Camp Sevier, a large army training camp during World War I. The city was overcrowded during the war years. Several Greenville doctors had been called into war service and those who remained were overworked. The influenza epidemic of 1918 made matters much worse. Through it all and in spite of it all Greenville had made a wide spread name for itself as a friendly, progressive city of fine people.

Greenville doctors began returning from the war in 1918, and other doctors who had gone from medical school or hospital or from smaller communities to the armed services came to Greenville to become a part of the medical community.

When the writer came to Greenville in November, 1919—fresh out of the army, he received a cordial welcome from every doctor he met and a very helpful one from most of them.

The doctors of that early postwar period who stand out in his memory were first of all a small group of doctors who had offices in the Southeastern Life Building or across the street in the Greenville News Building. These were Dr. C. H. Fair, a general surgeon, recently returned home after army service; Dr. William Burnett, a family doctor, but the most interested and wisest obstetrician in the city; Dr. W. B. Sparkman, who had recently completed special surgical training in Chicago, and who was limiting his practice to surgery, with special interest in gynecology; Dr. Gilman Glover, who was already in the process of limiting his practice to pediatrics, to become the pioneer pediatrician of the county. This group of men were to move into the then nearly completed Professional Building on East North Street, Greenville's first medical office building.

Dr. E. W. Carpenter and Dr. Emmett Houston were partners in practice and were outstanding specialists in diseases of the eye, ear, nose, and throat. They, too, were moving into the Professional Building. Dr. J. W. Jervey and Dr. L. O. Mauldin were the other two

specialists in eye, ear, nose, and throat.

Dr. C. B. Earle was in his prime and was undoubtedly the leading surgeon of the county. He had spent the war years as chief of the surgical division in the army hospital at Camp Wadsworth near Spartanburg. Dr. W. C. Black was his chief competitor in general surgery.

There was a private laboratory of clinical pathology and radiology operated by Dr. John Parker, who had recently taken special short term training in these subjects and who had moved to the city from Williamston.

Dr. Fletcher Jordan claimed the largest family practice in town, and he was a greatly beloved and very kindly doctor, and a very jealous one.

Dr. J. L. Anderson and Dr. R. C. Bruce also had large practices with the business and professional people of the city. White collar people were comparatively few as compared with the people who lived in the textile villages and intervening non-textile villages which surrounded the city. Although there was no distinct dividing line between these two groups, since there was considerable family inter-relationship, and some crossing over from one group to the other, it was true generally that there were city doctors and there were suburban doctors who were called mill doctors. Most new doctors got their starts in the mill villages, and many doctors elected to continue to serve that clientele, with no effort to build a city practice.

There was one fee for the textile or other worker in the suburban villages and another and a higher one for the professional, the tradesman, and white collar family within the city.

Except for the eye, ear, nose and throat specialists and the surgeons, doctors' offices were places to await for and to receive calls for house visits. It was not unusual to send a woman patient home to have any kind of a physical examination made. Doctors' offices were not staffed or equipped to make those examinations. The usual fee for an office medical call was \$1.00. The offices of the surgeons were better equipped and staffed, and much minor surgery was done in them. The emer-

gency room of the hospital was not well equipped for even very minor surgery.

Greenville has never been a city for evening or Sunday office hours. Whether that attitude resulted from a lack of economic pressure on the doctors, or from some other cause, the writer has never been able to determine. Dr. L. O. Mauldin went to his office regularly on Sunday mornings. Dr. C. B. Earle went frequently in order to do needed dressings. Other men went only when necessary. The evening hour usually ended at five o'clock.

Perhaps, because of this custom, or more likely because of the fact that the textile mills ended the day shift at six o'clock, there was always a peak load of house calls at seven to eight o'clock—made after the workers, husband and wives, had gone home, eaten their suppers, and he had gone down to the drug store, where a telephone was available.

During the early postwar years there came to Greenville a number of new doctors. Dr. C. C. Ariail had come early in 1919 to do general practice, but with a keen interest in obstetrics. The writer had come in the fall, to do general practice, but already was planning to prepare himself for obstetrics and gynecology as a specialty. Dr. George R. Wilkinson, first, and then Dr. Hugh Smith, both well prepared for specialty and consultation practice in internal medicine, opened offices equipped and staffed to do reliable clinical laboratory and diagnostic x-ray examinations, and to make, record, and file complete diagnostic studies. This was an important and progressive step in medical practice in the state, and one that became rapidly popular with doctors and with their patients. The men were soon referred to as diagnosticians, a designation which they made no effort to refute. It really was not so erroneous a title after all. The general practitioner of those days made no great effort to diagnose any except the more self-evident conditions. The general surgeons, although most popular as consultants regardless of the nature of the case, were given to quick physical examinations, brief histories, and frequently to snapshot diagnoses, backed up all too frequently by exploratory operation.

A patient could be sent to these new "diagnosticians" in the morning and by the next

afternoon and frequently, in acute cases, that same afternoon, one would have an opinion based upon a wide experience of careful observation and correlation, an extensive knowledge of the literature, a careful history, a careful physical examination, and adequate laboratory and x-ray studies. This was fast work, convenient work, and by men of good judgment. No wonder that people commented on their thoroughness, and that doctors and patients called them diagnosticians.

The Fewell twins, John and Will, came to Greenville in 1920 to become associated with Dr. Jordan in his large family practice. It was frequently whispered that Dr. Jordan furnished the patients, and the Drs. Fewell the modern medical approach in their practice.

Dr. Gilman Glover, a native of the city, had become interested in pediatrics as a specialty, and he restricted his work to diseases of infants and children shortly after the war. Dr. I. H. Grimbail limited his practice to pediatrics a short time later.

Dr. Richard Pollitzer was a native of Charleston. He had graduated at the College of Charleston and then at the Medical College of South Carolina. Like most young doctors who remained in Charleston after graduating at the Medical College, he became affiliated with it as an instructor. His medical interests were at first rather general, but as time went on, they became more and more limited to pediatrics. He prepared himself, perhaps, as well as was possible at that time, to be a specialist in pediatrics. He became an instructor and lecturer in pediatrics at the Medical College. He came to Greenville shortly after the war, and became the dean of Greenville's pediatricians, as he was also of fully trained pediatricians in South Carolina.

Greenville, already well supplied with general surgeons, eye, ear, nose and throat specialists, and internists, now became equally well supplied with pediatricians. Soon they were joined by Dr. John F. Simmons, who came from Greenwood, seeking a broader field in pediatrics.

Dr. Humphrey Wolfe came to Greenville after the war to take charge of the enlarged x-ray facilities of the City Hospital. He op-

erated the department in the hospital and had a private laboratory downtown in the then new Professional Building. He was well trained and skillful in x-ray diagnosis and also in therapy up to the limits of his equipment. Later because of either real or suspected excessive x-ray exposure he sold out his practice and equipment to Dr. Will Judy, who came to Greenville from St. George. Dr. Judy operated the business with great success and general satisfaction until his health failed him shortly after the mid-point of the century.

Along with the increase in numbers and in training and ability of the doctors and in their interest in specialization, there was an increase in the facilities and size of Greenville General Hospital as the old City Hospital has come to be called. These factors working together brought about a recognition of Greenville as not only a medical center but as the medical center of the northwestern portion of the state, the Piedmont Region.

The first out-patient clinic of the hospital was opened by the writer in 1930, with the help and the blessings of Mrs. Byrd Holmes, the progressive superintendent of the hospital. Gynecology was still a part of general surgery in the hospital staff organization. A general surgeon had said in the course of a rather heated discussion of a proposal that gynecology be separated from general surgery and united with obstetrics to form a new and independent division, that if gynecology were removed from the general surgery service, acute appendicitis, with emergency appendectomy, would be all that was left. It was not a great exaggeration. Ununited and malunited and a part of acute fractures had already been taken away from the general surgeons and given to the orthopedic division. Practically no stomach surgery, an occasional case of gallbladder surgery, only acute traumatic brain surgery, and no lung or heart surgery was being done. Chronic salpingitis, fibroid tumors of the uterus, ovarian cysts (including follicle cysts, ripe follicles, and corpus luteum cysts, all of which were being removed frequently, under the mistaken notion that they were abnormal) and operations for retro-



version of the uterus made up the great mass of surgery being done in Greenville.

The opening of an out-patient clinic in gynecology was an entering wedge, which finally resulted in the complete separation of gynecologic surgery and general surgery in the departmental set up of the hospital. It did not interfere with the private practice of gynecologic surgery by general surgeons.

In 1920, the Greenville Medical Society was an active, going concern. The meetings were held regularly, they were very well attended, and the programs were usually interesting. The secretary was the program committee, and it was up to him to find the speakers. Usually this was not too difficult, because competition was still keen among the membership, ambition ran high, and a good paper made a valuable impression.

The membership of the society had been small enough and its growth had been slow enough, that almost every member had had an opportunity to advance through the various offices to the presidency. To be elected president did not necessarily mean that a man had earned the honor by devotion and endeavor. It frequently meant simply that his time had come.

Sometimes the secretary was caught with a meeting imminent and no speaker immediately available. It was then up to him to write a paper himself if necessary. But to write and to discuss papers in those days was no novelty. The members of the society prepared the programs for the meetings.

Not only did the local doctors prepare their own programs for the county society meetings. A group of younger men who came to Greenville after World War I organized a medical club, which was attended enthusiastically and regularly for many years. The programs consisted of papers based on cases seen and treated, followed by general discussions. Strangely enough, the interest in the meetings was finally destroyed by a member who was too enthusiastic, too regular in attendance, and too excessive in his participation, along with the fact that his cases were not too interesting to the group. He talked the club to death.

It was in this postwar epoch that the Gen-

eral Hospital became accredited for intern training. Since that time it has never had any great difficulty in attracting a nearly adequate intern staff each year. Thus many of our outstanding doctors came to Greenville first as interns.

The end of this era was marked by the beginning of World War Two. The impact of the war was first felt medically when Dr. C. H. Fair, Dr. C. N. Wyatt, Dr. W. W. Edwards, and Dr. J. E. Lipscomb, each of whom was in the medical officers reserve corps, were ordered to active duty. Then went Sam Fisher who had been declined in the first World War. Then Hugh Smith was accepted by the army, after having been declined by the navy. Then went Gertrude Holmes. Men too young to serve in World War One were called to duty now in rapid succession: Dacus, Goodlett, Cline, Taylor, Allison, Allen, Perry Bates, Robert Brown, Moore, Tom Parker, Poole, Hal Powe, Reese, West Simmons, Keitt Smith, Whitworth, McBrearty, and others. The Greenville Society provided forty-five service medical officers.

There resulted a tremendous squeeze in Greenville's medical service—more people, a rapidly increasing birth rate, and a decimated medical profession. Many of the general practitioners gave up obstetrics under the pressure of other work. The obstetricians operated their practice on an assembly line basis. Hospital beds were in such short supply that obstetrical patients were kept in hospital only three days, and there was usually some woman in labor waiting for every bed about to be vacated.

Induction of labor was the rule rather than the exception, and labor was arranged when possible, so that delivery would occur at night so as not to interfere with office practice. Many a doctor at home longed for the regular and short hours of colleagues who were assigned to military hospitals in this country or abroad.

So the epoch ended on a note of fatigue, overwork, haste, lack of opportunity for deliberation or recreation on the part of the older men who were left at home, and on one of impatience and regret and the realization

of increasing age without any financial security and without the seasoning which must come, before one can be happy in his

practice, on the part of the younger men in service. It was truly a time for a change, the change that was already coming.

## MEDICAL COLLEGE CLINICS

### THE MEDICAL COLLEGE OF SOUTH CAROLINA

#### ELECTROCARDIOGRAM OF THE MONTH

##### Precordial R' Waves

DALE GROOM, M. D.  
Dept. of Medicine

This month's unusual electrocardiogram was contributed by Dr. Leonard J. Ravenel of Kingstree, S. C.

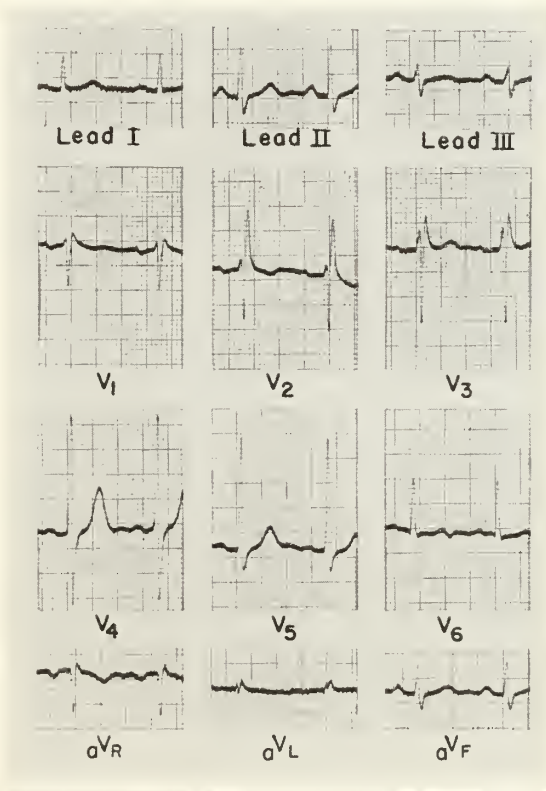
**Case Record**—A 30 year old man was judged by history and his manifestations of anxiety to have neurocirculatory asthenia. No objective evidence of heart disease was found nor were any specific symptoms of cardiac disability elicited. His electrocardiogram is shown below.

**Electrocardiogram**—There is a fairly regular sinus rhythm at a rate of 82 and the P-R interval is at the upper limit of normal (0.20). None of the limb leads show any real abnormality. However in the unipolar leads recorded over the right side of the precordium there are huge R' waves reaching up to 10 mm. in height in V<sub>2</sub>, and width of these QRS complexes exceeds 0.10 as contrasted with the normal measurement of 0.08 in all leads from the extremities.

The T waves are diphasic or inverted in V<sub>1</sub> and V<sub>2</sub> but the apparent inversion in V<sub>6</sub> is an artifact.

**Discussion**—Small R prime waves (second positive deflection of the QRS following the R and S waves) are fairly common in electrocardiograms of normal subjects. Usually they are no more than 1 or 2 mm. in height, have almost negligible width, and are largely confined to leads from the right of the sternum. They may be so inconspicuous as to go unnoticed. R' waves of the magnitude and width shown here, extending as far to the left as V<sub>3</sub>, are unusual, and their interpretation in the absence of obvious disease is uncertain.

Prominent R' waves in V<sub>1</sub> and V<sub>2</sub> are known to occur in right bundle branch block, in right ventricular hypertrophy (the so-called "diastolic overload" type), in the Wolff-Parkinson-White anomaly, in tracings having S waves in all three standard leads (the "S<sub>1</sub>, S<sub>2</sub>, S<sub>3</sub> syndrome") and in normal hearts. Similarly, myocardial infarction may disrupt ventricular conduction to a specific area sufficiently to cause them, as in "peri-infarction block". Flattened, diphasic or in-



verted T waves are a frequent accompaniment of large R' deflections.

Most of these causes can be ruled out here with reasonable certainty. The normal width of the QRS complexes in all the limb leads plus absence of an S wave in lead I would not be expected in right bundle branch block, nor would the normal electrical axis if there were any appreciable degree of right ventricular hypertrophy. Actually, this electrocardiogram is within normal limits except for the first three precordial leads, and the first half of the QRS complexes in them is normal with increasing R waves as the electrode is advanced to the left. It is the terminal portion of these QRS deflections which apparently contributes the additional width at that particular area and indicates that the underlying myocardium is being depolarized late. Moreover, the direction of the delayed depolarization (R') is anterior, toward the

electrode at the  $V_2$  and  $V_3$  positions, not toward the right as it would be in right bundle branch block. Since this terminal potential is predominantly in the antero-posterior plane it is not portrayed equally in leads taken from the extremities and lateral aspects of the heart.

The currently accepted explanation for the type of R' waves illustrated here is that they are due to late depolarization of an area of myocardium in the region of the pulmonary conus. This is based on the fact that it is the pulmonary outflow tract, formed largely by the crista supraventricularis, which faces

anteriorly and underlies the position of the electrode on the right precordium where the peculiar deflections are recorded. But why activation of that area should be so delayed in some subjects, or should give rise to so large a potential in others, is not entirely clear. Enough R' waves similar to those illustrated in this case but of lesser magnitude have been recorded from apparently normal hearts that they should probably be regarded as normal variants in the absence of any other electrocardiographic or clinical evidence of disease.

## THE CHANGING IMAGE OF MEDICAL CARE

HARRY J. LOYND

President

Parke, Davis & Company

Michigan Clinical Institute

Detroit, Michigan

March 12, 1959

The subject I have selected for my remarks, "The Changing Image of Medical Care," was chosen because I believe that it is something we should recognize and a subject which is, or should be, of deep concern to us. I would like to explore this topic with you.

The public's concept of adequate and proper medical care is changing, in some respects for the better, in others for the worse. They appreciate the ministrations of the medical profession, but not always its ministry.

There are, of course, many reasons for this, not the least of which is the avidity with which all news media respond to medical news, both good and bad. Perhaps, too, in light of this interest, the traditional professional reserve and total devotion of the physician to his strictly professional duties has made it appear that he resists any change in his environment.

Dr. Frank Slaughter, as reported in the *Journal of the Florida Medical Association*, as part of a talk entitled, "The Physician in a Troubled World," has this to say: "Perhaps the most deadly form of conformity, as applied to doctors, is the widespread belief that a man of medicine must be isolated from the affairs of the world. Medicine must always deal not simply with disease but with the whole man in relationship to society, for man cannot long remain healthy in an unhealthy society. The great men of medicine have all been outstanding as intellectuals, as philosophers, or in other ways. One needs only to read the writings of Sir William Osler and Oliver Wendell Holmes to realize this truth once again. Even Rudolf Virchow, father of cellular pathology, left his microscope long enough to write: 'People must feel that they belong together, not on account of a common ancestry, which they perhaps do not have . . . but on account of a spirit in which they live together.' What better credo could be laid down in these troubled times when

the nations of the world must stand together for peace, or fall separately into oblivion?"

Since you have been kind enough to invite me, a non-physician, to talk on this program, I would like to immediately establish a common ground for discussion and to emphasize that I have no feeling of hesitancy in making a few observations or in mentioning some problems which, in my opinion, should be considered by the medical profession. Let me explain that my lack of trepidation in this assignment is due to the fact that the ethical pharmaceutical manufacturers, whom I represent, are, today, so intimately and directly concerned with the problems of medicine and their solution, that we could not possibly place ourselves in a position of a totally disinterested observer, even if we wished to do so. Our success and our future survival are totally dependent upon the well-being of the private practice of medicine. We have a proprietary interest in any problem or any program of the medical profession. We must, therefore, have and maintain a complete familiarity with medical practice and a continuing determination to further everything that is good for our democratic concept of medical care, and to oppose every effort to dilute or destroy it. In short, I would like to have you consider my remarks as those of an "inside-outsider," and of one who is deeply conscious of the fact that your problems are, in part, our concern as well.

I would like also to eliminate any impression which my introduction as a "pharmaceutical lecturer" might have given. It is not my intention to lecture this group of practicing physicians as a professor would before a group of students. Rather, I would ask that you consider my remarks as those of a professional colleague who is just as deeply concerned with the problems of medicine as are any of you, and who is, in fact, perhaps even more so when you consider the



point I have already made that the survival of the ethical pharmaceutical manufacturing industry is totally dependent on your survival as an independent element of the free enterprise system.

I would ask that you gentlemen consider that some of the problems of the pharmaceutical manufacturers are also your problems, and that the way in which both your profession and ours conduct their activities is mutually important and mutually contributory. Of more immediate concern is the fact that the public is immensely interested in our business and your profession and have been inclined, particularly in recent years, to take an almost intrusive interest in us.

Today, health—or the lack of it—which we call disease, is no longer entirely a personal thing; it is not even an insular thing. Health is everybody's problem and everybody's business—and there is getting to be an astronomical number of "everybodies." In 1957, the world population was estimated as almost 3 billion persons and in 1958 were added another 47 million. In one year, the total world population was increased by more people than the populations of all the New England states plus those of New York, New Jersey, Pennsylvania and Maryland. Further, it is expected that within the next 20 years the total population of our world will increase to over 4 billion people! Since this population explosion is by no means confined to far away foreign areas, we must be more than casually interested and concerned. As colleagues in the business of medical care, we must recognize the immense problems this population bulge will create for our health team in the future. We in the pharmaceutical manufacturing industry have tried to recognize this huge population increase by the expansion of our research and production facilities, with particular reference to our worldwide operations. We feel that the medical problems of the rest of the world are of more than academic interest to us in this country and, in fact, that expansion of our facilities to the other continents might well be considered as a constructive kind of statesmanship. In the long run, drugs which cure or suppress malaria in India or control yaws in Africa may prove to be more decisive weapons against tyranny than intercontinental ballistic missiles.

As population grows, so will increase the already widespread interest in medical care and in therapy itself. We have seen, in the past few years, a revolution in the public reporting of medical and scientific progress throughout the world. Whether we approve or not, the fact remains that all peoples have developed an almost insatiable appetite for medical information. News media have discovered that the reporting of such information is of greater reader interest than almost any other subject. This intense concentration of attention on our professions has been, perhaps, a blessing in disguise. We in the pharmaceutical manufacturing industry frequently have been embarrassed by premature publicity of our research efforts. The medical profession has been equally dis-

turbed by public demands for medications which have not even had satisfactory clinical trial before the public knows more about them than do you. Perhaps, however, we should not be too disturbed by this somewhat premature reporting of medical advances if we consider the public's appetite for this type of information as an indication of their earnest desire for better medication and greater disease prevention. Rather, we should take the necessary steps to see to it that the information the public receives is accurate and free from exaggerated or unwarranted claims. Unfortunately, we have not as yet done very much to insure this type of accurate medical reporting or to eliminate sensationalism and wishful thinking from medical information furnished to, or acquired by, public reporters. We tend to scream in anguish over exaggerated medical articles in public journals but we, too often, do little or nothing to insure the accuracy of such reports. In fact, we sometimes try to cloak ourselves in an "ivory tower" atmosphere of mystery and erudition which is illogical. We are both living in a medical "goldfish bowl"—in an age when everything an industry or profession does is open to immediate public reporting and opinion. We are subject to scrutiny which can rapidly become highly critical if great care is not exercised to insure that the public understands our activities. In this connection, I am reminded of an article which appeared in a recent issue of *Medical Economics*, entitled, "You're Not Running a Private Concession!" In this article, Dr. Norton S. Brown, President of the New York County Medical Society, states that, "While medicine used to be entirely a private enterprise, it is changing to the character of a public utility." He says, "Medicine used to be a private concession operated by doctors for doctors. It is now becoming a public utility operated by doctors in cooperation with other segments of society."

It is entirely possible that the pharmaceutical industry is also assuming some characteristics of a public utility, at least to the extent that is evidenced by public interest in our products and in our research program, and by the attention devoted to us by political and governmental groups.

Here, again, perhaps we should be complimented, rather than frightened, by this sometimes irritating attention. It indicates that medical care is a vital public issue, and, therefore, deserving of political attention as a factor which will influence voters toward those politicians who make use of its obvious position in the public consciousness.

The American medical profession, and its ancillary services, including pharmaceutical manufacturers, have set a standard for the world. Through the achievements of our research programs, and the capacity of our drug industry, we have demonstrated our ability to successfully control disease and nutritional problems which were historically accepted as destroyers of populations. The rest of the world has seen our success and wants to share it. This is a good thing, and is our responsibility and our opportunity

to make not only a medical, but a political contribution to the world in which we live.

We in this industry are proud of our research contributions and of the way in which they have assisted the physician in his efforts to treat or prevent disease. We like to think that we both have contributed toward a longer and healthier life span for the world's people. Perhaps we have helped the public to achieve a confidence that most major diseases can be adequately controlled with existing knowledge and medicines. Together, we have probably maneuvered ourselves into the position which was recently expressed by a prominent clinician discussing medical advances. He said that we have made so many advances in the prevention or cure of previously epidemic infections that we are in the anomalous position of saving people from so many of the diseases which decimated populations in the past, that they are now candidates for diseases which were previously of small statistical importance and which were largely ignored in previous medical care programs. We quite literally prevent their illness or death from some infections so they may become victims of other and as yet unconquered ones. There are many more mountains on our medical horizon and there is little probability that our research efforts can or should be curtailed in the future. We still have a big job to do in medical research.

We also have one in a seemingly unrelated but equally vital field—public relations. While our ability to do a medical job of prevention and cure has given us the stature of a giant, our image, in the mind of the public, has changed. Too many of them are being told that our private medical system is an avaricious and selfish one—in short—that it's about time to cut it down to size and control it by regimentation and bureaucratic supervision. The public gratefully, even if sometimes indifferently, accepts the vastly improved service we offer but they read that it costs too much.

How has this changing image developed—and why? A generation or less ago the relation between a physician and his patient was a highly personal one in which little or no outside influence would, or indeed was permitted to intrude. There was little reason for the physician to explain his medical or economic procedures to the patient. I know that you will agree that the attitude of the public toward their medical advisors has changed. It is now one to which some physicians find it difficult to adjust and one which is resented by others and indeed baffling to some.

The physician these days is not treating just the affected patient on a personal basis, but is guiding whole family units—mates, parents and siblings—to mold environments where stressful stimuli as causative or contributory agents are effectively reduced.

In this changing image, the trend is toward a greater institutional character in medicine. It is a world-wide trend. In all countries, regardless of differing economic or political systems, medicine is changing from a private relationship between two

individuals into a medico-social institution or, more precisely, into part of a great network of social welfare institutions which is making it possible to shift the emphasis from periodic cures to continuous health maintenance.

Also, the 1959 physician is dealing with a much more "hep," sophisticated and demanding clientele—the group brought up in the past decade on popular magazines accepted by them as authoritative "medical journals."

After reading some of the current comments in lay journals, it is rather disheartening to reflect that we, who were so recently eulogized as the source of life-saving miracle drugs, are now pilloried as profiteers. And it's plain by the news from Capitol Hill that such criticism is not limited to magazines and newspapers, but is relished as a grassroots political issue.

It is said that there are almost 2 million persons who owe their lives to new drug discoveries of the past 15 years. The fact that some of these same persons are now criticizing the industry and the profession that saved their lives is not base ingratitude—but, rather, simply ignorance of the facts. Again, an example of the need for a sound public relations program.

All of us—physicians, pharmacists and manufacturers—are partners sharing a common interest in serving the health needs of the patient. The image they form of us should be of mutual concern. We should all work together to demonstrate our rightful position, because, in this changing image of medical care, health is indeed everybody's business.

We must recognize that it is our job to educate the public to some phases of medical care which have previously been highly privileged and therefore undiscussed and unpublicized. We must lead the public to understand that medicine is an art and a science which is not, and never will be, a completely exact, formalized, or mechanical procedure. We must teach them to understand that experimentation and risk is always involved. We must do these things, and yet, at the same time, impress them with the high quality of private medical care and the desirability of its administration by private practitioners. We must welcome accurate and factual reporting and we must justify our procedures, and the price we charge for them.

I would like to take a moment to discuss this element of medical care—its cost—a subject which has received an enormous amount of publicity, much of it critical and detrimental. It is alleged in the public press that medical care is too expensive and, in support of this accusation, we see articles which state that the physician makes too much money, that hospitals grossly over-charge their patients, and that drug products are over-priced to the excessive profit of the producer. It is not my intention to launch into a long explanation or defense of the economics of drug product pricing, or of medical care itself, other than to say that here, indeed, is one area where we have failed to give the public our side of the story.



The alleged facts that have been aired by the public press are sometimes warped, exaggerated or illogical conclusions by writers who are antagonistic or who are simply appealing to an apparent appetite for sensationalism. Most newspaper and magazine writers, on the other hand, are sympathetic with the public relations problems of medicine, and many of them have done us signal service in presenting the true facts to the public. For example, in our industry, we have found that, if you give the press the complete facts, both technical and economic, their reports are accurate, well-written and sympathetic. The good scientific writer resents his undisciplined colleague just as much as we do a maverick in our own ranks.

We have not done a very good job of explaining the cost of modern medical care in the light of what the average person gets for their medical care dollar. Certainly modern medical care, and its auxiliary services of hospitalization and drugs, cost more per unit than they did in previous generations—but *what do they get for their money?* In my opinion, today's medical care is the biggest service and commodity bargain that any person will ever buy in their entire lifetime! But we have not convinced the public of this fact.

If we are to avoid further federal legislation, spurred by public misunderstanding, the health team must explore all avenues and join together to support a mutually beneficial program of public information and communication based on nothing but facts—in short—a good, sound public relations program. It is important if we are to keep medicine in the hands of the medical practitioner and not hand it, by default, to some government agency or bureau.

A recent survey of medical and pharmaceutical associations throughout the country would indicate that there is much confusion and uncertainty as to just what they should do on the subject of public relations. In fact, the survey revealed that there is almost an even split between those who feel it desirable to deal directly with qualified science writers of the press and those who feel that it is not in the public's interest to report on medical activities. Most of the associations have public relations committees, but in many instances their relations with the lay press rather resemble two strange bulldogs glaring and snarling at each other. It is obvious that there is little agreement on a basic policy in dealing with the press, and it is apparent that the physician and the pharmaceutical manufacturer both need and are looking forward to the day when a clearer understanding of public relations responsibilities will lead to more productive public relations efforts. The results—a better informed and more *accurately* informed public.

As time goes on, the long-term interests of the medical profession, the ethical pharmaceutical industry, and the general public are going to become increasingly identified. Moreover, with the passage of time, the welfare of each group—the fate of each group—is going to rest increasingly in the others'

hands. It is of paramount importance, therefore, that each of the three groups learn to understand and appreciate the problems and viewpoint of the other two. Only through mutual knowledge and understanding can each group be led to sacrifice its own short-term interests for the long-term common good, so necessary now that health is becoming everybody's business.

Let's face it! We are going to have public attention—public relations—whether we like it or not. Let's make sure it is *good* relations and *favorable* attention.

We don't need to impress people that we are skilled—that we are capable—that we are "ten feet tall!" We need, rather, to demonstrate that we are wide in our understanding, sincere in our desire that everyone, regardless of their economic level, benefit from our joint efforts—that the mystery of the medicine man is no longer part of our image—but that its removal reveals a bigger and more cosmopolitan profession—and one which needs—and deserves—unreserved public approval and support.

Our *external* communications are a problem—but I believe we have an *internal* one as well. As I see it, today's physician finds, because of the tremendous increase in medical knowledge, that his period of training has no end, either in time or cost. The pressures on him to specialize have increased to the point where, even if he decides to go into general practice, he feels the need to pass his boards to become a "general specialist." The personal pressures on him, especially the demands on his personal time, have increased to the point where he cannot possibly accomplish all of the things he feels he should do: see one to two hundred patients per week; read ten to fifteen general and special medical journals per month; see ten to fifteen detail men a week; read several hundred pieces of direct mail each week; attend hospital staff and county medical society meetings; attend special seminars; attend state and national medical conventions; etc.—all this besides sparing a little time for the demands on him as a human being, for a wife, children, and a little civic and social life. So it is not surprising that he may neglect the intangibles of his public socio-economic image.

Can the drug manufacturers help with this problem? The answer is "yes." We have already taken an active role in the job of creating a good public image for medicine. My own company, for example, has carried on, for nearly 30 years, an extensive advertising campaign—not on our products—but on the behalf of the medical profession. We have urged the public to "See Your Doctor"; we have discussed "The Cost Of Medical Care"; and we are now telling them of the rich heritage of the medical profession. We would like to believe that this campaign has helped convince the public that our private medical care system is worth keeping as the biggest bargain of their lives. The many comments we have received, both from the medical profession and from the public, convince us that it *has* helped.

It is still, however, a job for both of us—you as physicians— and we as manufacturers—to justify this



concept to a public already conditioned to a paternal political concern with health matters and to convince them that a private enterprise medical system is not only effective, but, in the long run, less expensive.

Perhaps in our urge to grow medically tall we have distorted and attenuated our old public image. We

need social and economic width if we are to avoid "welfare state" control.

Millions now living and millions yet unborn will have healthier and happier lives because of the medical job we can do. Let's make sure their concept—our image—is an equally healthy one.

---

*The surgical correction of calcific aortic stenosis in adults II. Results in the first 100 consecutive transaortic valvuloplasties.* Dwight E. Harken, Harrison Black, Warren J. Taylor, Wendell B. Thrower (Charleston) Harry S. Soroff and Vannevar Bush. Jour. Thoracic Surg. 36:759, December 1958.

The life cycle of aortic stenosis has been shown to end quickly once deterioration begins. The usual symptom triad of angina, syncope or left ventricular failure, and auricular fibrillation with the physical finding of a diamond-shaped aortic murmur and calcification of the aortic valve on fluoroscopy and left ventricular hypertrophy by electrocardiogram are strong indications for consideration for operation.

In a series of 54 patients advised by us to have operation on similar indications but who did not accept or come to operation 49 were dead within six months.

One hundred consecutive patients had surgical correction by a newly developed transaortic procedure. The mortality rate has gradually decreased from 35% in the first 20 patients to 8% in the last 60 patients. Follow-up studies from 6 to 36 months indicate that 86% are improved.

Serious consideration for surgical relief to all patients with symptomatic aortic stenosis should be given. The gratifying salvage from this fatal disease encourages further use of this technique.

---

*The surgical correction of calcific aortic stenosis in adults. I. Technique of transaortic valvuloplasty.* Dwight E. Harken, Harrison Black, Warren J. Taylor, Wendell B. Thrower, (Charleston) Harry S. Soroff and Vannevar Bush. Amer. Jour. Cardiology 4:135, August 1959.

Surgical correction of calcific aortic stenosis in adults in congestive failure constitutes a great surgical challenge. After experience with various open and closed techniques a transaortic valvuloplasty has been developed. Study of postmortem specimens (by color movies) without destroying the valve ring leads to better comprehension of basic morphologic patterns of aortic stenosis. Recently the pulse duplicator has added to the kinetic evaluation of valve function.

Differentiation of aortic stenosis, aortic insufficiency, arteriosclerotic heart disease and associated mitral

valvular disease may not be clear by clinical findings alone. Left heart catheterization combined with indicator-lution studies represents a useful and safe tool for hemodynamic appraisal.

The aorta is exposed through a vertical midline sternotomy. A plastic tunnel is sutured to exclude a portion of the aorta. The surgeon's finger or valvulotome is insinuated through the tunnel which controls bleeding and permits fracture of the commissures with mobilization of the valve leaflets. The head vessels are occluded during manipulation of the calcified valve for 15-20 seconds with rest periods of at least two minutes with no serious cerebral embolic complications in the past 99 patients. Operative mortality and follow-up studies are reported elsewhere.

---

*A lithopedion and a contralateral tubal pregnancy.* Harry R. Temple, M. D. (Florence) and Lawrence L. Hester, Jr., M. D. (Charleston) Obst. & Gynec. 14:537, (Oct. 1959).

A case report of a 32 year old colored female who reported to the out patient clinic of the Medical College of South Carolina with the history and physical findings of a ruptured ectopic pregnancy of approximately 12 weeks gestation. At laparotomy there was active bleeding from the right fallopian tube and a 12.5 cm. living fetus with the placenta attached to the fimbriated end. Replacing the distal one third of the left tube was an 8 cm. ovoid, necrotic placental mass. Further exploration of the upper abdomen revealed an 18 cm. partially calcified lithopedion separate from the pelvic viscera and enmeshed in the omentum. Bilateral salpingectomy and omentectomy were necessary for removal of the fetuses.

Due to the improved treatment of salpingitis the incidence of ectopic pregnancy may have actually increased; however, the detection of this condition has also improved, so that lithopedion formation is a truly rare occurrence. Oden and Lee in 1940 enumerated the conditions necessary for the development of a lithopedion, one of which is the fetus must survive in the abdomen for more than 3 months (otherwise it is absorbed).

There are a number of interesting cases reporting the circumstances leading to the discovery of this unusual condition.

# PRESIDENT'S PAGE

## THE CARE OF THE AGING

Why should a Pediatrician write on this topic . . . (The Care of the Aging)? Well, my answer is threefold: First, I am speaking as President of the South Carolina Medical Association. Second, it is the responsibility of the pediatrician to give them the proper start in life, and we are now giving these infants and children such an excellent beginning, that they know not when to stop. Thirdly, and by no means least, it is a topic that has increased in magnitude, which involves almost every physician and encompasses practically all professions and businesses.

At the turn of the century the average life expectancy was 47.3 years of age. In 1920 . . . 54.1, 1930 . . . 57.7. In 1957 average life expectancy in males was 66.3, females 72.5. The number of people in the United States sixty-five years and over, estimated July 1, 1957 was 14,750,000. Advance in life expectancy in the first half century has been largely due to lessened infant mortality and control of infectious and contagious diseases. The further increase in longevity of life will be due to advances made in the care of the aging.

You can readily judge why it is of utmost importance that we take cognizance of this gigantic task. Is it not the research scientist and the doctors who have been responsible for prolonging their lives? The answer is definitely, yes, therefore it is certainly our responsibility to see that the aged are properly cared for.

What are we doing about it? Where the incomes of such individuals are limited, we as practicing physicians must make adjustments. Some of these people may be able to pay the full medical, surgical, and roentgenological fees, but by far the majority will not be able to meet them, therefore, I ask you to fulfill their needs by sacrificing time, ability, equipment, and your staff to do the right thing by looking after these wonderful citizens. It is their twilight of life; let's lift their horizon to a golden age of medicine.

It will require sacrifices and teamwork. The insurance companies and the Blue Cross are writing Health and Hospital Care Insurance for the Aged. I believe they have made careful studies of this problem and are giving us as fair and equitable return as possible. Let's give them a fair trial if it does not work, we can make adjustments.

There was held in Washington, D. C., June 12th, 13th, 1959, the first Joint Council to Improve the Health Care of the Aged. The purpose was:

"To encourage and assist affiliates in establishing state joint councils,

To develop patterns for joint effort and planning, and

To help delineate the role of affiliates in preliminary state conferences and the White House Conference on Aging, to be held January 9-12, 1961.

The Objectives:

Identifying and analyzing the health needs of the aged,

Appraising available health resources for the aged,

Fostering effective methods of payment for the health care of the aged,

Developing community programs to foster the best possible health care for the aged,

Fostering health education programs of the aged, and

Informing the public of the facts related to health care of the aged."

My experience in St. Petersburg, Florida, demonstrated to me, that the population and the citizenry of this fascinating city were well aware of the problems of the aged. There were parks with many benches and shuffle boards. A great many of these individuals were playing golf. Some were fishing, some were boating, some reading, and others playing cards. There were many features in which these individuals could be interested. When they crossed the street at the proper intersection a car or vehicle would stop to let them continue. This is one way in which they get recognition in the proper way. No doubt there are many other places where this ever growing group of individuals are being looked after by furnishing them recreation, relaxation, and education, which spells occupation.

William Weston, Jr., M. D.

President, South Carolina Medical Association

# Editorials

---

## ASSUAGING AGING

That the difficulties of the aging population are real and considerable there is no doubt, but there seem to be many unanswered questions as to the magnitude and the solution of the problem now so prominent to the public eye.

Statements from the proponents of the Forand bill and similar measures give the impression that there is a sudden and radical change in the status of those people who reach the "aging" years, arbitrarily set at 65. The picture which has been painted is that of millions of people dropping their activities abruptly and suddenly becoming indigent, unhappy, bewildered, and unable to pursue a satisfactory mode of living. Little is said of the fact that a great many, probably most of these people are bolstered with savings and other sources of available funds, are quite content in quiet retirement or reduced activity, and are quite well able to pursue with comfort a satisfactory way of life, or even to interest themselves in a new and different kind of existence.

It is doubtful that there are any reliable surveys available which give the true view of the present and future situation of old people in respect to medical and other needs. Many generalities have been advanced, and the supposed needs probably have been much exaggerated in order to excite public and political sympathy for providing expanded benefits under a ballooning "Social Security" system.

A recent article\*, well worth reading, puts new lights on some of the obscurities of current proposals. It points out that—"a striking feature of both the report and the testimony favoring the bill is the bias resulting from an almost complete lack of consideration of the assets of persons aged 65 and over and the almost exclusive emphasis on their cash income position.

Even a cursory consideration of the prob-

lem should convince the reader that emphasis on money income tends to obscure the fact that many people aged 65 are at last reaching the time when they can retire on their savings. Why should it be difficult to understand that persons over 65 years, who have retired, have a lower income than those under 65 years of age who are still working and have not retired? Indeed, in a fairly prosperous society not devastated by inflation, one would expect a large proportion of those over 65 years of age and retired to be more comfortably off than those still at work."

Accepting the often repeated statement that about three fifths of all persons of 65 years or older had less than \$1000 money income in 1958, we must still consider other assets, both personal and family. An equally valid statistic is that 47% of all persons between 14 and 65 had incomes of \$1000 or less (1957). Furthermore the group over 65 makes a good showing in its possession of liquid assets, and in freedom from the burdens of mortgage payments and other expenses which beset the younger citizen. While after 65 income figures fall, savings figures show a healthy level.

Obviously there are many variations in individual resources, but the problem is not a group problem. The article noted above concludes. "It should be apparent that the use of money income alone in assessing the financial status of those over 65 years of age may lead to erroneous conclusions. The relatively substantial liquid assets of those over 65 years of age are of great importance. These observations raise some questions as to the desirability, and even the sincerity, of legislative proposals designed to compel those under 65 years of age to pay for the medical care costs of those over 65, regardless of financial status. Certainly in many individual cases those over 65 are better able to afford medical care than those under that age.

"Physicians and others whose efforts are devoted to providing the best quality of medical care and to preserving and extending human

\*J. A. M. A. 171:1231 (Oct. 31) 1959



life should not overlook the implications of programs drawn up by an alliance of 'experts' with a vested interest in government activities and politicians seeking election or reelection. There are indeed chronic problems of aging and the aged, but, above all else, they are individual human beings. Moreover, if governments will refrain from engaging in activities sure to destroy the purchasing power of people's accumulated dollars the problem, at most, is temporary. Instituting a permanent program and a new bureaucracy to provide governmental health care for the aged, regardless of need, supplies a 'cure' that may be worse than the 'disease' in its ultimate effects on individual freedom and a free society."

Surely the aging need concern and material care including medical care but care need not be based on an unsound paternalistic program. Already the medical profession is diligently occupied with finding a solution. In the face of mounting pressure for the Forand type assistance, physicians must hasten to offer some plan that is sound and appealing as far as medical care is concerned. Other facets of the problems of old age must be approached by the many segments of society which must be concerned.

## GLAUCOMA INCIDENCE

All over this country many clinical studies have been made and are being made on the incidence of glaucoma. One of the best to date is that reported by P. M. Lewis and coworkers at the University of Tennessee College of Medicine and appearing in the October 24, 1959 issue of the *Journal of the American Medical Association*. It is of interest to note that glaucoma appears more frequently in the physically ill, and in the negro race, (where incidentally it is most difficult to treat). These findings are corroborated by similar although less meticulously done studies at the Greenville General Hospital where an incidence of approximately three percent of glaucoma was found in 2,000 patients. Interestingly enough in this small series two cases were found in the hospital employed personnel. Locally in Greenville a number of younger physicians have become interested in tonometry and cases are being referred frequently by them to an ophthalmologist. The importance of tonometry routinely done in all patients over forty years of age cannot be too strongly emphasized. No physical examination after this age can be considered as complete without the determination of the intraocular pressure.

J. W. Jervey, Jr., M. D.



### GP OFFICERS

Clemson College, October 1-2

Left to right: H. M. Whitworth—Sec.-Treas., I. R. Wilson—Retiring President, W. T. Hendrix—President, M. Teague—President elect.

(E. S. Pouell, Photo)



# BLUE CROSS . . . BLUE SHIELD



## BLUE CROSS — BLUE SHIELD

There is much talk throughout the country about excessive utilization of hospital insurance. Excessive utilization implies hospital care when hospital care is not needed. Unnecessary hospitalization in turn requires more hospital beds in hospitals handling acute disease than are needed to accommodate the sick who need hospital treatment. The building and maintenance of more hospital beds than are needed is a very expensive luxury and an unnecessary one. That cost is placed, as a rule, on the taxpaying public.

However, unnecessary hospital care is also an unnecessary expense to the sick. If one is not insured, he pays the cost himself. He also pays part of the cost of hospital care for his less fortunate neighbor, for his hospital bill is weighted so that he pays more than the actual cost of his care. If he has hospital insurance, he and his insured fellows pay through increased insurance costs. Perhaps the greatest indirect factor in bringing about a constant increase in hospital rates is the building of more and more hospital accommodations for acute disease. When beds are hard to get, doctors use care to avoid filling them unnecessarily. Hospitals attempt to control unnecessary admissions and unnecessarily prolonged hospital stays.

The following letter illustrates how our Blue Cross plan attempts to analyze the factors of hospital admissions in order to protect the plan from paying benefits which are not provided for in the insurance contract. At the same time, it attempts to treat the subscribers fairly and to pay all benefits that are provided.

Some of our doctor friends think that this type of analysis is unwarranted meddling in the treatment of patients. There would be much less indication for it if doctors, hospitals and insured persons would be more cooperative in not demanding benefits not provided by the insurance.

Dear Doctor:

The Blue Cross contract of insurance contains the following provisions:

"For admission . . . primarily for diagnostic studies, x-ray examinations, laboratory examinations, basal metabolism tests, or electrocardiograms, South Carolina Hospital Service Plan will provide an allowance . . . as follows: up to \$10 for the first day of hospitalization, etc." (See Article II, B-2)

Therefore, in the case of the hospitalization of a member, answers to the following questions should be determined:

1. Was hospitalization primarily for diagnostic studies, or
2. For laboratory examinations, or
3. For x-ray examinations, or
4. For B. M. R., or
5. For E. C. G.

In your letter about your patient who was awarded the benefits provided in the quoted paragraph from the contract, you state that your patient was not admitted for diagnosis because you knew already that she had osteoporosis and that she had had renal disease. You felt that at the time of admission she either had renal disease or a collapsed vertebra.

Granted that what you say is true, then the question still remains, why was she admitted to the hospital? Was it not to attempt to determine whether or not she did have renal disease and whether or not she did have a collapsed vertebra? And to make these determinations, did you not plan to use x-ray examinations and laboratory examinations? If so, were not those procedures both primarily and differentially diagnostic? It was our thinking, when we allowed only the minimal benefits provided in the quoted paragraph of the contract that such was the case.

Actually, you continued your diagnostic investigation even further than the spine and the kidney, and you came up with a diagnosis of duodenal ulcer.

It seems to me, then, that you admitted the patient primarily for x-ray examinations and that you continued the examinations and finally and much to your surprise made a diagnosis of duodenal ulcer. When that diagnosis was made, you discharged your patient.

However, I recall that in our conversation about the case you mentioned something that does not appear in the hospital record, namely, that your patient was suffering severe pain at the time you admitted her. It seems to me that the primary reason that you hospitalized her was because she was suffering pain (cause undetermined, it is true) which you did not and could not relieve without ascertaining its cause. If that were the case, the questions for determination before benefits could be assigned were:

1. Was the discomfort severe enough or was it probable underlying cause severe enough to warrant hospital care?

2. Could the efforts to determine the cause of the pain be done equally as well and as safely on an out-patient basis as on an in-patient basis?

Certainly the x-ray studies she had could have been done and frequently are done on an out-patient basis, with satisfactory results. However, this individual was 65 years old; she suffered chronic pains; she was now in acute pain; she lived a considerable distance from the hospital; she is a widow; it is highly unlikely that she could carry out adequately the procedures for preparation of the G-I tract for x-ray studies. Therefore, I am inclined to agree with you that she was a

case for in-patient study, and if that is true, her hospital care should be covered by her insurance contract. Therefore, I am advising that the decision of the Claims Department be reversed and that your patient be granted full Blue Cross benefits.

I have discussed this case at length to indicate our method of approach in cases like this. You doctors could help so much by seeing that the hospital chart reflects your thinking. It should answer the questions: Why does the patient require hospital care? Is he sick? In pain? Bleeding? Apprehensive? Am I admitting him primarily for x-ray examinations or for other diagnostic examinations? If so, do they require

that the patient be a bed patient in the hospital?

Your admitting diagnosis, as stated, should reflect the primary reason for the admission. It need not be a true diagnosis. It may well be and frequently should be the statement of a symptom: high fever, continuous fever, severe headache, abdominal pain, etc. It is better to state a presenting symptom, although the symptom is not a diagnosis, than to record a guess as to the cause of the presenting symptom with little substantiating fact to justify it.

Very truly yours,  
J. Decherd Guess, M. D.  
Medical Director

The South Carolina Medical Association urges you to

# FIGHT FOR AND

Send a handwritten letter to your congressmen and any others who may have a voice or a vote.

## Analysis of Replies to Questionnaire Concerning Scientific Program

WILLIAM H. PRIOLEAU, M. D. AND DALE GROOM, M. D.  
Charleston, S. C.

Shortly after being appointed, the Committee on Scientific Program sent out to all members the following questionnaire drawn up by the Vice Chairman for the purpose of soliciting ideas to serve as a guide for increasing interest in the scientific sessions of the annual meeting of the South Carolina Medical Association.

July 18, 1959

Dear S. C. M. A. Member:

Your Program Committee would appreciate your taking a few minutes time to give us your suggestions for the planning of future programs of the South Carolina Medical Association. To make it quick and easy we have enclosed a *self-addressed, post-paid card for reply*.

As you have perhaps noticed, attendance at the Scientific Sessions of our annual conventions has been conspicuously small in proportion to our total membership. Working on the assumption that the best solution to this problem is to arrange a program which will be of the greatest interest and usefulness to the most members, your Committee is considering certain modifications in the program as noted below.

The time allocated for Scientific sessions in the past has been one and one-half days, including about eight papers of one-half hour each (most of them by guest speakers from outside the state), and two panel discussions and a Clinical-Pathological conference each running about one hour and fifteen minutes in length. In addition there is the Presidential address and also the annual banquet with a distinguished speaker, usually medical.

How can we utilize this time to best advantage? Perhaps the present schedule is best. Or if more speakers are added from our own ranks, their time limit might be reduced to fifteen or twenty minutes. Allotment of time for formal discussion of papers or for question periods would likewise entail some cutting. Ordinarily panel discussions are not practicable in much less than one hour, particularly if audience participation is included.

The choice of subjects for both papers and panels is a major consideration. Do you think these should be quite *general* in scope (as, for example, "The treatment of congestive heart failure"), or more *limited* (e. g., Diagnosis of esophageal carcinoma)? Some members, and especially the wives, might prefer a non-medical speaker for the annual banquet.



Another suggestion which might be considered is that of holding a future convention aboard ship on, for example, a four-day cruise to the Bahamas which might be available at fairly nominal cost on a group rate.

Most important in this questionnaire are your own suggestions for making the program most useful. Won't you take a moment *now* to fill out the enclosed card and drop it in the mail today? Or use a letter, and sign it or not as you wish.

Thanks.

#### Scientific Program Committee

Some 1400 of these letters were mailed and to date more than 350 replies have been received. Those replies which lend themselves to tabulation are set forth in the table.

#### TABULATIONS

1½ day session—Approved	
Yes	324
No	42
Out of State Speakers	
More	181
Less	42
Same	23
Local Speakers	
More	85
Less	66
Same	18
Subjects, preferred	
General: Yes	189
No	11
Limited: Yes	80
No	20
Some of both	4
Scientific Papers	
More	143
Less	48
Same	29
Papers—length:	
10-15 minutes	88
20-30 minutes	121
Over 30 minutes	17
Panel Discussions	
More	153
Less	60
Same	26
Panel—length:	
Less than 1 hour	101
1 hour	134
More than 1 hour	27
Discussion Periods	
More	108
Less	51
Same	14
Cruise Convention	
Yes	177
No	50
Undecided	10

Subjects suggested for the program encompass practically the entire field of medicine including scientific, economic, and ethical aspects. There were many requests for papers of a practical nature on such subjects as office practice in various fields, laboratory and diagnostic procedures, and surgical techniques and minor surgery. While some preferred that papers of a theoretical nature be omitted, some few desired presentations of recent advances even before they had been published, expressing opposition to hearing a "rehash" of papers which they had previously read in a journal.

There were a number of requests for discussions on

psychiatric subjects such as psychoanalysis, hypnotherapy, psychosomatic medicine, emotional disorders, chronic alcoholism and the newer cerebral acting drugs. Other topics suggested were viral diseases, perinatal care, geriatrics and terminal care. Still others, too numerous to mention, were for subjects commonly included in medical programs. Under the heading of medical economics and ethics—and there were an impressive number of these—were such subjects as compensation problems, insurance claims, legal medicine, "Mistakes I have made once", "Modern Medical Ethics", and the "Art of Medicine". The Association's long-standing custom of including prominent guest speakers in the programs was approved by the vast majority of members replying to the questionnaire.

Certain comments and suggestions along general lines are of particular interest. Opinion was almost unanimous that the banquet speaker should be non-medical. There was considerable opposition to Myrtle Beach as a meeting place both because of its remote location in the state and also because of its resort attractions which interfere with attendance upon the Scientific Sessions. One prominent physician expressed great concern about this, asserting that the same group attends the conventions year after year and naturally votes to perpetuate the same arrangements for Myrtle Beach as a meeting place. That the conventions be rotated through the larger cities in the state was offered as a solution. There were a number of forceful expressions to the effect that drinking and carousing are of such degree as to make the meeting undignified and to seriously interfere with the scientific sessions. A few members felt that the scientific program should be abandoned altogether, leaving the conventions largely for social and business functions. Some advocated clinics, grouping of papers into symposia, and concurrent meetings of specialty groups. There is sufficient merit in some of these suggestions to warrant their exploration.

Arranging for a well rounded and attractive Scientific Program is difficult at best and there is every indication that it will become increasingly so. Some of the reasons for this are evident. The time allotted in the present system for preparation of the program is inadequate. Due to summer vacations, several weeks may elapse between the issuing of an invitation to a speaker and receipt of his reply. The program has to be completed by the first of February for publication in the March issue of *The Journal*. Not infrequently speakers are unavailable on account of previous engagements (particularly in May which is a popular month for meetings). Furthermore, payment of an honorarium, in addition to expenses, is the practice of an increasing number of societies, and failure to do so by the Association has doubtless been the reason for refusal by some of the prominent speakers invited in the past. After all, several days taken out of a busy schedule constitutes a considerable personal contribution.

Probably the most important cause for difficulty in

obtaining outstanding speakers is that the meetings of state Associations generally do not enjoy a reputation for well attended scientific sessions. Good fellowship, recreation and late parties too often take precedence over the educational features. This point was brought out forcibly in a number of replies, a few of them favoring abandonment of the scientific program on that account.

On the positive side, obviously the difficulties resulting from inadequate time would be alleviated if the scientific program committee could be appointed shortly after the election of the president-elect. In such case, the place and time of the annual meeting could be designated two years in advance. It may be advisable now — and even become necessary within a few years — for the association to provide an honorarium for out of state speakers. Serious consideration should be given to making changes in the programs along the lines of those suggested in replies to this questionnaire. The time relationship of the business and scientific sessions should be reviewed. Finally, the overall program, including social and recreational activities, should be re-evaluated with the idea of placing proper emphasis upon the professional and scientific sessions. The whole answer does not lie in the type and quality of the offerings at the scientific sessions. While the business meetings are essential and social functions desirable they should be so arranged as not to overshadow or encroach upon the educational part of the program, even if that necessitates further separating the business from the scientific sessions.

The idea of holding a convention aboard ship on an ocean cruise has also been considered and was included in the questionnaire for consideration by all members of the Association. There is ample precedent for this type of convention. More than half a dozen such cruises are now scheduled by various eastern medical organizations during the next year. There are certain obvious advantages of a cruise ship convention, including that of better attendance at the meetings (a prospect dear to the hearts of all program committees).

As shown in the tabulation, the responses were overwhelmingly in favor of a cruise convention. Some of the comments of the 177 favoring the cruise are of interest: "A good idea—let's rest Myrtle beach—let's cruise." "Everyone else is doing it." "Lots of fellowship and business—I am for the cruise." "Believe a weekend four to five day cruise would be ideal." "Cruise every third or fourth year." "This is something the wives would enjoy too."

Most of the comments opposing the idea did so on the grounds that it would be too costly of time and money: "Would eliminate many who cannot attend for full four days." "Cruise takes men from small areas away too long." "It would leave out the younger men who can't afford it." "Against any cruise—anywhere within the state of South Carolina is good enough." "Nice work if you can get it."

Preliminary investigation revealed that all-expense rates per person for a four day cruise would run from \$100.00 up, depending on room accommodations.

Rates for a five day cruise would begin at \$125.00. Approximately 10% is customarily added for gratuities. Exclusive booking of a ship such as the air conditioned S. S. *Evangeline* would require a minimum of 300 persons but it is common practice to hold conventions aboard ships without booking them exclusively. Smaller ships are also available.

A four day cruise from Charleston would allow one port of call—Nassau. For Havana or Bermuda five or six days are required. Adequate facilities are provided aboard for the various meetings and exhibits, both scientific and commercial.

Your Program Committee has garnered the above information as a guide for the planning of future meetings. Responses to the questionnaire will be presented to the officers and counselors of the South Carolina Medical Association for their consideration as an expression of opinion of the membership at large. Plans for the 1960 convention are, of course, virtually complete already and it is this Committee's major concern to make the Scientific Program at the Ocean Forest Hotel at Myrtle Beach, May 18th and 19th, an outstanding event in the history of our Association.

#### Scientific Program Committee

William H. Prioleau, M. D., Chairman

Dale Groom, M. D., Vice-Chairman

George Durst, M. D.

George Bunch, M. D.

William Weston, M. D.

Robert Wilson, M. D.



OFFICERS OBSTETRICAL AND  
GYNECOLOGICAL SOCIETY

Left to right: W. A. Hart, outgoing president, David Watson, new president.

(E. S. Powell, Photo)

The South Carolina Medical Association urges you to

# FIGHT FOR AND

Send a handwritten letter to your congressmen and any others who may have a voice or a vote.

---

## NEWS

---

### SPARTANBURG MAN HEADS G. P. CHAPTER

Dr. William Hendrix of Spartanburg is the new president of the South Carolina chapter of the American Academy of General Practice.

He was installed as the group ended a two-day meeting at Clemson.

Dr. Martin Teague of Laurens was chosen president-elect, to take office at next year's convention, Sept. 29-30 at Spartanburg.

Dr. Sam J. Garrison of Johnston was installed as vice president and Dr. Horace W. Whitworth of Greenville as secretary-treasurer.

Among new directors named were Drs. Thaddeus Timmons of Lake City, Richard E. Hunton of Greenwood, William G. Whetsell of Orangeburg and Harold F. Hope of Union.

Elected delegates to the national academy were Dr. Harold Jervey of Columbia for two years and Dr. George Price of Spartanburg for one year.

---

### DR. W. S. SMITH ADMITTED TO ACS

One of Colleton's doctors was among the 1,013 doctors initiated into the American College of Surgeons at a recent convocation in Atlantic City, N. J. Dr. Warren S. Smith was one of nine from South Carolina awarded this honor.

He is a graduate of The Citadel and the Medical College of S. C.

After completing Medical school he interned at the St. Louis City Hospital, St. Louis, Mo. During World War II he served for two years in the Air Force as a Flight Surgeon. During this period he was stationed for a while in England.

Upon being discharged he returned to the Washington Emergency Hospital for a year and then returned to Williams where he practiced general medicine for four years. Leaving there he returned to Charleston where he completed four years as a resident surgeon at the Surgical Center at the Medical

College Hospital. On July 1, 1957, he opened an office in Walterboro for the practice of general surgery and last year built a new office at 821 Carn St., where he now practices.

---

### GENERAL PRACTITIONERS MEET AT CLEMSON

South Carolina physicians who have chosen general practice as their field of medicine convened for their annual two-day scientific session at Clemson, Oct. 1.

The S. C. Academy of General Practice heard a panel of lectures on technical, medical topics and an address from Dr. Fount Richardson of Arkansas, president of the American Academy of General Practice.

Displays of medical interest had been planned by nearly 50 exhibitors for the convention at Clemson House.

Purposes of the Academy, as outlined by its South Carolina president, Dr. I. Ripon Wilson, Jr. of Charleston, are "to promote and maintain high standards in general practice of medicine and surgery, to encourage the future physician in properly qualifying in general practice, to insist on staff privileges for those qualified, and to help prepare the trainee and post-graduate student—all this to the advancement of medical science and private and public health."

---

### DOCTORS HONORED BY EXCHANGE CLUB TUESDAY EVENING

"Doctors' Night" was observed by the Exchange Club of Greer at the Cotton Club in October with all physicians of the city being special guests.

Dr. Lewis M. Davis, member of the Exchange Club, introduced the following other physicians who were in attendance: Dr. R. C. Alverson, Dr. J. L. Hughes, Dr. Frank Woodruff, Dr. D. L. Allen, Dr. Warren Snoddy, Dr. T. O. Walker, Dr. Francis Sullivan and Dr. Paul Peebles.

J. R. Waters, club president, told the physicians that the meeting was being dedicated to them and he expressed appreciation for the fine job which they are doing. J. R. Wood and E. A. Burch were other guests present.



#### LADIES ATTEND MEDICAL MEETING

The fall meeting of the executive board of the Woman's Auxiliary to the South Carolina Medical Association was held in Spartanburg Sept. 29 at the home of Mrs. J. G. Ramsbottom, state president.

Dr. William Weston, Jr. of Columbia, president of the South Carolina Medical Association, addressed the group at the luncheon session.

Luncheon was served by Mrs. Ramsbottom in her home to those present. The money collected from the usual dutch luncheon was presented to the American Medical Education Foundation.

#### DR. GAUSE TO PRACTICE

Dr. William E. Gause, Jr., opened his office Oct. 12 at 3258 Beltline Blvd., Columbia to practice medicine. Dr. Gause recently was with the Air Force at Shaw Air Force Base.

While at Shaw he was deputy hospital commander, chief of the professional services, chief of the outpatient department, chief of pharmacy, assistant chief of the O. B.-Gyn. service, assistant chief of the internal medicine department, president of the medical boards and medical officer in charge of the prisoners health service.

Dr. Gause is a graduate of the Medical College of South Carolina in 1956. He interned at Columbia Hospital.

Dr. Gause also worked at the State Hospital for three months.

#### DR. WEBB ELECTED

Dr. Leroy Webb of Greenville has been elected 1960 president of the Greenville General Hospital Alumni Association, it was announced by Dr. W. H. Thames, retiring president.

Dr. Thames also listed Dr. John Folger of Brevard as vice president for the forthcoming year, Dr. W. W. Edwards as secretary and Dr. J. K. Kebb as program chairman.

Both Dr. J. K. Webb and Dr. Edwards are Greenville physicians who served as alumni officers during the current year. Dr. Edwards was vice president for this year and Dr. Webb, program chairman, the same office he will hold again next year. Dr. John S. McCutcheon, also of Greenville, was secretary.

Together with the hospital medical staff and the county medical society, the association sponsors the annual Hospital Day observance. Alumni officers are elected at the annual meeting by physicians who are former interns of the General Hospital house staff.

#### DR. MOORHEAD LOCATES IN ANDERSON

Dr. Samuel R. Moorhead, Jr., a native Andersonian who is well known there, began the practice of medicine in Anderson in September.

Dr. Moorhead attended Duke University, where he finished in 1950. He studied medicine at the Medical College of South Carolina, graduating in 1954.

He served a year's internship at Indianapolis General Hospital in Indianapolis, Ind., following which

he began his military service at Flight Surgeon's school at Randolph Field, San Antonio, Texas. He completed his service at Warren Air Force base at Cheyenne, Wyoming, coming out of service with the rank of captain.

His residency was done at Charity Hospital in New Orleans. Before starting his practice, Dr. Moorhead had a special course in children's allergies at Duke University.

#### DR. DAVIS IS NEW HEAD OF PHYSICIANS

The 24th annual Piedmont Post Graduate Clinical Assembly came to a close following election of new officers.

The assembly, in its final session, heard technical lectures by various authorities, several from medical colleges in this area.

The new president of the assembly will be Dr. John T. Davis, of Walhalla. He will succeed Dr. Herbert Blake, of Anderson.

Other officers are Dr. Sam H. Fisher, Greenville, executive vice president; Dr. James H. Sanders, Gaffney, vice president; Dr. A. Ellis Poliokoff, Abbeville, vice president; Dr. Ned Camp, Anderson, secretary-treasurer; and Dr. Hervey W. Mead, Pendleton, registrar.

#### DR. STRAIT, III OF ROCK HILL ASSOCIATED WITH DR. SIMPSON

Dr. W. Frank Strait, III is associated with Dr. James L. Simpson in the practice of obstetrics and gynecology at 311 Pendleton St., Rock Hill.

He is the son of Dr. and Mrs. W. Frank Strait, Jr., of Rock Hill.

He graduated from the Medical College of South Carolina in 1953 and interned at Greenville General Hospital from July, 1953 through June, 1954. Dr. Strait practiced medicine in Rock Hill for two months prior to entering the Air Force in 1954. For two years, he was stationed at Moody Air Force Base, where he was chief of the obstetrical service at the base hospital for a year. He also served as a flight surgeon.

In 1956, he entered residency training in obstetrics and gynecology at the Medical Center Hospitals in Charleston. He completed his training in September. While there, he served for a year as a teaching fellow.

#### DR. WILLIAM S. LYLES

Dr. William S. Lyles, Winnsboro surgeon, was recently elected and initiated as a Fellow of the American College of Surgeons. The convocation was held October 2 in the ballroom, Convention Hall, Atlantic City, N. J.

Dr. Lyles opened an office in Winnsboro for the general practice of surgery in November, 1954, and he is a member of the surgical staff of the Fairfield County Memorial Hospital. A native of Columbia, he received a B.S. degree from Yale University and an M. D. degree from the Medical College of South Carolina. He interned at the Metropolitan Hospital, New York City, later took 4½ years of specialty

training divided among several recognized hospitals. He finished his training at the City Memorial Hospital, Winston-Salem, N. C., as chief surgical resident.

During the Korean Conflict, he did a two-year tour of duty as a medical officer with the U. S. Navy and he was attached to the Army Medical Corps in Japan for six months. He also served a one-year surgical residency at the U. S. Naval Hospital, San Diego, Calif.

Colquitt Sims, Jr., M. D. and Henry B. Hearn, III, M. D. take pleasure in announcing that Sam R. Moorhead, Jr., M. D. will be associated with them in practice limited to Diseases of Infants and Children in Anderson, S. C.

### COLUMBIA MEDICAL SOCIETY

Dr. William Weston, Jr., President of the South Carolina Medical Association, will be the principal speaker at the Scientific Meeting of the Columbia Medical Society, Monday, January 11, 1960. The meeting will be held at the Columbia Hotel, with the social hour beginning at 7:00 P. M., dinner at 7:45, and the scientific session at 8:30 P. M.

Dr. Weston will speak on the subject "Progress in Medicine and PR". Dr. Hugh H. DuBose of Columbia will also speak at this meeting, and officers of the Columbia Medical Society for the year 1960 will be installed.

All interested physicians are cordially invited to attend.

Drs. Jervey, Goforth and Brown announce the association of Clark S. Collins, M. D. recent resident at the Massachusetts Eye & Ear Infirmary, Boston, Mass. in the practice of otolaryngology at 709 Dunbar Street, Greenville.

### DOCTOR JOHNSON BEGINS PRACTICE IN COLUMBIA

Dr. Elbert N. Johnson, Jr., has begun the practice of internal medicine at 2011 Hampton St.

Dr. Johnson is a native of Wagram, N. C., and a graduate of Wake Forest College. He received his medical degree from the Bowman Gray School of Medicine.

Following an internship at the City of Detroit Receiving Hospital, he served in the U. S. Army Medical Corps during the Korean War.

Subsequently Dr. Johnson received his residency training in internal medicine at the University Hospital, Augusta, Ga., and Roper Hospital in Charleston.

He is a member of the Columbia Medical Society, the South Carolina Medical Assn., the American Medical Assn., and the American Society of Internal Medicine. He is also a diplomate of the American Board of Internal Medicine.

For the past three years Dr. Johnson has been on the staff of the Veterans Administration Hospital. He is married to Dr. Ruth Smith Johnson, formerly of

Fort Mill. She is currently on the medical staff of the South Carolina State Hospital.

### SOUTH CAROLINA CORTISONE BANK ESTABLISHED FOR KIDNEY DISEASE PATIENTS

Patients with nephrosis or other forms of Kidney Disease may obtain steroid drugs at cost price from the newly formed South Carolina Cortisone Bank, sponsored by the National Kidney Disease Foundation.

The National Kidney Disease Foundation, which was founded in 1949 as the National Nephrosis Foundation, operates, through its chapters, 33 similar Cortisone Banks throughout the country. These Cortisone Banks are part of the three-fold program of the Foundation, to:

1. Support medical research on Kidney Disease
2. Disseminate educational information
3. Help patients financially through Cortisone Banks

Although South Carolina has no organized Chapter, the Foundation is licensed to operate in that State, and the North Carolina Kidney Disease Foundation is helping to organize the South Carolina Bank.

Chairman of the South Carolina Cortisone Bank is Mrs. M. G. Layton, 4615 Oxford Road, Columbia, South Carolina, and inquiries may be addressed to her. Medical Advisors to the program are Dr. Guy Castles, pediatrician, of Columbia, and Dr. John Paul, Jr., Professor of Pediatrics at Medical College of S. C. in Charleston. All prescriptions will be filled by a registered pharmacist at Breeden's Drug Store in Columbia.

At a later date, 5 mg. Meticorten will be available free for medically indigent patients.

Mrs. William Newell  
Cortisone Bank Chairman  
N. C. Kidney Disease Foundation

### S. C. TO RECEIVE RECORD \$4,615,318 IN U. S. FUNDS FOR HOSPITAL USES

South Carolina will receive a record \$4,615,318 in federal funds for hospital purposes during the current fiscal year.

The state has received 29½ million dollars from the federal government for hospitals since 1947.

The money has helped provide 22 new hospitals, 4,408 additional beds, and numerous other clinical and medical facilities.

There still is a need for adequate, well-planned, modern medical treatment facilities. About 25,116 new hospital beds and 166 health clinics are needed to meet the state's requirements.

### HEART RESEARCH

Dale Groom, M. D., Assistant Professor of Medicine, Department of Medicine, Medical College of South Carolina, has just been awarded a grant of

\$46,150 for a period of five years by the National Heart Institute to study and evaluate heart sounds. This announcement was made recently by Dr. Kenneth M. Lynch, President of the Medical College. Since 1953 Dr. Groom has been making extensive studies of human heart sounds and murmurs with the main purpose of recording sounds which are not audible on ordinary stethoscopic examination.

In the Heart Sound Laboratory at the Medical College of South Carolina Hospital new and highly sensitive instruments have been developed by Dr. Groom with the collaboration of engineers of the General Motors Research Laboratories. The collaboration between medical and engineering talent on this project was initiated by the late Mr. Charles F. Kettering and has resulted in the development and application of electronic equipment capable of picking up from the body surface sounds of extremely low intensity — sounds which tell something about the mechanical function of the human heart in health and in disease.

Using these ultra-sensitive instruments in a sound-proof room it has been possible to record murmurs which are not audible to the ear, including a particular type of heart murmur which Dr. Groom and his associates have recently reported to be present in virtually all normal people. The same techniques are being applied to the earlier detection of fetal heart sounds — those from the baby before it is born — and these have already been recorded as early as the 3rd month of pregnancy.

With the new research grant from the National Heart Institute these investigations in the Heart Sound Laboratory at the Medical College will be considerably expanded. It is hoped that they will lead to improved methods of earlier diagnosis of heart disease.

---

#### TEENS INFECTED WITH VD ONE PER MINUTE

American teen-agers are being infected with venereal disease at the rate of one a minute, a former American Medical Association president reported recently.

"I think it is not only noteworthy but alarming to consider that more females are infected at the age of high school graduation than at any other age period," said Dr. Elmer Hess, Erie, Pa., urologist.

He reported syphilis on the increase in 30 states and gonorrhea in 41 states, with 22 per cent of the infections in persons under 20.

---

#### STATE TRANSPORTATION OF CRIPPLED CHILDREN TO BE DISCONTINUED

Due to insufficient funds to carry on its program of hospitalization and other services, the Crippled Children's Division has found it necessary to discontinue after January 1 financial responsibility for the transportation of crippled children to and/or from any hospital, clinic, physician's office, convalescent home,

or any other place, by public health nurses or any other individuals or agencies.

This is in line with current policies in several other southern states. Various means of transportation are used in these states which do not involve expenditure of Crippled Children's funds.

Some of these means are volunteer individuals, agencies, and car pools, parents or family of the patient, Elks, civic clubs, N. F. I. P., Welfare, county tax funds, Red Cross, Highway Patrol, school busses, Crippled Children's Society, and Travelers' Aid.

Approached through these avenues and any others available locally, this problem should not constitute an insurmountable obstacle to the continuance of service to crippled children in the state.

---

#### NUMBER OF HANDICAPPED CHILDREN SERVED INCREASES

A review of the first 20 years of operation of the crippled children's program shows that the number of handicapped children served increased from an estimated 110,000 in 1937 to 313,000 in 1957, Mrs. Katherine B. Oettinger, Chief of the Children's Bureau, has announced.

During this period, the rate per 1,000 child population served doubled from 2.4 in 1937 to 4.7 in 1957.

The program to serve crippled children is made possible through a state-federal partnership established by the Social Security Act of 1935. Both the federal and state governments contribute financially to its support. On the basis of their financial and medical resources, the states define crippling conditions they will accept for treatment. They operate the program through single state official agencies, utilizing hospitals and other treatment centers.

The federal government, through the Children's Bureau, offers consultation to the states, collects facts about new treatment methods, assists states in serving more children and helps finance the training of workers who will serve handicapped children.

---

#### DIRECTORS OF CHRONIC DISEASE PROGRAMS MEET IN CHICAGO

Dr. G. E. McDaniel attended the biennial session of the Association of State and Territorial Directors of the Chronic Disease Program in Chicago September 21-23.

"Health Department Leadership in Chronic Disease" was the theme of the meeting. The program consisted of discussions of public health activities in the control of cancer, heart disease, and in the care of long-term illness in the aging.

The need for additional field demonstration projects in cancer control was discussed. The Public Health Service has available a limited amount of money for such projects, and one submitted by South Carolina has a favorable chance of being approved. These projects are for field demonstrations and are entirely separate from the research projects.

In the field of heart disease it was pointed out that there were six areas of interest in which activities



might be expected to accomplish good results. These six areas are rheumatic fever, congenital heart disease, congestive heart failure, stroke, hypertension, and coronary disease. Much is already being accomplished in the prevention and treatment of rheumatic fever, and there is much being done to determine the possible cause and control of coronary disease.

There was considerable discussion of experiences in the field of health and medical care for the aging which included such studies as multiple screening, cervical cytology, geriatrics clinics, and pre-retirement health counselling.

In addition to the types of programs in many states, the institutional care and rehabilitation of the aging and others suffering long-term illness and experiences in home care services received much consideration and discussion. Facilities and nursing care in nursing homes is a problem in all states. Since the nursing home is a recognized integral part of any long-term illness program, the improvement of facilities and nursing care is a prime objective in all states.

---

## ANNOUNCEMENTS

---

### SPECIAL PEDIATRIC CRUISE

The North Carolina Pediatric Society, in collaboration with the South Carolina and Virginia Pediatric Societies, is sponsoring a Pediatric Seminar Cruise to Bermuda. The T. S. ARIADNE of the Hamburg-American Line will sail May 21, 1960, from Wilmington, North Carolina, returning May 26. The cruise will include not only medical seminar meetings, but also cocktail parties, dances, sightseeing and shopping in Bermuda, and other special activities. The ship will be in Bermuda for two days, which should provide ample opportunity for seeing this lovely island at its best season. The ARIADNE is completely air-conditioned and equipped with all the luxuries of a cruise ship. Staterooms can be held for a limited time only; then they will be sold to the public. Therefore, contact your nearest World Travel Department of the 14 Carolina Motor Club offices as soon as possible for further information and reservations for your family and friends.

---

The MID-SOUTH POSTGRADUATE MEDICAL ASSEMBLY will be held February 9, 10, 11, 12, 1960, at the Peabody Hotel, Memphis, Tennessee.

---

### THE AMERICAN COLLEGE OF SURGEONS SECTIONAL MEETING IN LOUISVILLE, KENTUCKY, JANUARY 21-23, 1960

Surgeons and related medical personnel are invited to attend the three-day Sectional Meeting of the American College of Surgeons in Louisville, Kentucky, January 21 through 23, 1960. Headquarters will be The Brown Hotel. This is the first College meeting in Louisville since 1950.

### AMERICAN DIABETES ASSOCIATION EIGHTH POSTGRADUATE COURSE DIABETES AND BASIC METABOLIC PROBLEMS

The Course will be given in Los Angeles, California, January 20, 21 and 22, 1960. The Ambassador Hotel, where all lectures are scheduled, will serve as headquarters.

Presented by: The Committee on Professional Education of the American Diabetes Association.

Major Topics: The following principal subjects will be covered during the six half-day sessions: Fundamentals in Diabetes, Diagnostic and Therapeutic Considerations, Clinical Sessions in Diabetes—or Diabetes in Review, Vascular Complications of Diabetes, and Diabetes on the Research Frontier.

The American Academy of General Practice will give 18 hours of Category II Credit for the Course.

The three-day Course is open to Doctors of Medicine. The fee is \$40 for members of the American Diabetes Association and \$75 for nonmembers.

Social Activities: All registrants will be guests at a Banquet to be held the first evening, Wednesday, January 20. This occasion will be preceded by a Social Hour (by subscription).

---

### A.M.A. SCHOOL HEALTH CONFERENCE

Health and physical education must be an integrated part of the school curriculum. In this era of emphasis on science and academic excellence, health and physical education still have a vital place in the school program.

In general this was the consensus of some 250 participants at the seventh National Conference of Physicians and Schools, held recently (Oct. 13-15) at Highland Park, Ill.

Sponsored by the American Medical Association, under the auspices of its Department of Health Education, the conference was attended by representatives of state medical societies, state health and education departments, and national organizations interested in child health.

It was recommended that attention be given to close integration of the program of health instruction with health service functions and healthful living in the school. The testing of vision and hearing, weighing and measuring, health examinations, and such matters as lighting, ventilating and sanitizing are too often dealt with in isolation.

*Periodic health examinations for school children:* It was generally agreed that periodic health examinations of schoolage children are worthwhile. The frequency of physical examinations, their nature and effectiveness are determined by the level of public acceptance of need, the availability of physician and dentist time, and the administrative relationship between the home, the school, and the practicing physician and dentist. No single plan will work everywhere.

The groups concluded that:

—A physical examination includes the complete history; a thorough physical examination; counseling about problems of healthful living and necessary immunizations.

—Emphasis should be on adequacy of the examination, not on frequency. At least four physical examinations during the school life of the child are needed, with additional examinations being made on referral by the school nurse or teacher.

—The best place for physical examination of children is the office of the family's physician. Examination there carries more connotation of independent personal action than examinations made in school, and should have a better educational carry-over.

—It is inadvisable to have physical examinations of all pupils each year as recommended by some state laws, since this is an unwise expenditure of money and professional time.

It was suggested that school health services direct their activities toward care and follow-up of conditions brought to light initially by teacher observation, absentee follow-up, and other screening tests not requiring the time of the physician.

This recommendation was based on the findings of a four-year study in the Rochester schools, which showed that only a very small percentage of children benefited from annual examinations.

*Standards of study for health education:* The groups agreed that there is a "middle of the road" between rigid national standards for each grade level and no standards at all in health education.

The word "standard" should be replaced by such words as "guide posts," "goals," "guide lines," or "expected outcomes." Rigid national "standards" for each grade level are undesirable and impractical; however, there is a need for some type of "standards" which are sufficiently broad to develop sound attitudes and practices.

---

### Uncle Sam with a Stethoscope by Dr. Louis M. Orr

President of the American Medical Association, at the 68th annual meeting of the Association of Life Insurance Medical Directors of America, Hotel Statler Hilton, New York City, Thursday, October 22, 1959.

Most of you know, I am sure, that the Forand Bill—which was first introduced in 1957—is being considered by the 86th Congress. This legislation would provide certain hospital, surgical, nursing home and dental benefits to persons receiving Social Security retirement and survivorship payments. The same idea, with numerous variations in benefits and eligibility, will be appearing in many other bills and amendments.

The real issue is not the specific provisions of the Forand Bill, but rather the basic principle involved. Any Forand-type legislation would raise the same danger. It would add service benefits to a Social

Security program which so far has been limited to cash payments based on the "floor-of-protection" concept.

This new principle, as you know, would alter the nature of the Social Security program. It would pave the way for evolution of a system of tax-paid health care for the entire population. Every two years—in the even years of federal elections—the push for amendment and expansion would be under way. The continuing trend would first undermine, and eventually destroy, our system of voluntary health insurance and the private practice of medicine.

No action was taken on the Forand proposal during the first session of the 86th Congress. However, it will carry over into the second session. And next year may be a different story. Because of its political appeal, this issue may very well assume "top priority" status in the presidential election year of 1960.

From the defensive standpoint, we must be alert to the strategy and tactics which probably will be employed by backers of the Forand Bill. For example, we should keep in mind these possibilities:

They will be ready to accept compromises that will water down the bill.

They are chiefly interested in establishing a precedent, no matter how small, for government-financed health care of the aged.

By using the tactics of "divide and conquer," they will try to prevent the American Medical Association from establishing a united front with the insurance industry, the Blue Plans and the American Hospital Association.

To disarm physicians, and lessen the intensity of their opposition, the bill may be amended to cover only hospital and nursing home care.

Every effort will be made to dilute the plan so as to make it more palatable to the hospitals. This strategy may include the suggestion that Blue Cross serve as the fiscal agent for any Social Security hospitalization plan.

To disarm those who are concerned over the potential cost of the Forand Bill, the age of eligibility may be raised to 70 as a starter.

• • • •

This different approach will be more dangerous than any outright attempt to pass the Forand Bill as it now stands. A compromise proposal would appear to be harmless, and would not open the gate quite so wide right at the start, but it would lead to the same eventualities.

To counter this approach, we must establish and maintain a united front of physicians, hospitals, insurance companies, Blue Cross, Blue Shield, and all other groups that would be affected by such legislation. It is especially important for hospital administrators and trustees to realize that any kind of government subsidy—either direct from Washington or indirect through a fiscal agent—would simply be the first step toward federal controls.

However, we must do much more than just organize a good defense. We have to show that medicine and



insurance have a better answer than the kind offered by Forand-type legislation. Our objective is not simply to beat an undesirable bill in Congress. Our major goal is to help solve a problem. And this particular problem gives us an opportunity for practical action—a challenge to produce dramatic progress in the growth and development of health insurance coverage for older people.

Of course, definite progress already had been made before Mr. Forand emerged on the scene with his version of an old idea. As of 1958, some 43 per cent of the people over 65 had some form of health insurance protection. Many encouraging activities and trends have been taking shape during the past few years.

For example, the number of persons over 65 covered by voluntary health insurance has been increasing at a greater rate than the total number of persons reaching age 65.

Coverage for persons now over 65 has been more widely available than generally recognized, but until recently it has not been "pushed" hard enough by most insurance companies and prepayment plans.

Continuation after retirement of coverage carried during working years is extending rapidly.

The principle of paid-up policies at 65 is still in the experimental stage, but despite the problems there are several possible ways in which this might be accomplished.

For the past year or more, both the Blue Shield Plans and the Health Insurance Association of America have had special committees actively studying means of expanding coverage for older persons. The latter organization, as most of you know, has been urging member companies to offer policies that are guaranteed renewable for life, individual and family coverage for persons already over 65, group coverage that will continue after retirement, and group contracts providing the right to convert to individual coverage when employment is terminated.

To help stimulate all these developments, the House of Delegates of the American Medical Association last December adopted a proposal which applies specifically to the population group over 65 with very modest resources or low family income. For medical services rendered to this particular group, physicians are urged to accept a level of compensation that will permit the development of insurance and prepayment plans at a reduced premium rate.

Needless to say, the A.M.A. is urging all state and county medical societies to implement that policy of adjusted fees with the utmost speed and vigor. And early this year the Blue Shield Plans developed a model insurance contract for persons over 65, in-

corporating the principle of the A.M.A. policy action.

By August, when we testified before the Senate Sub-Committee on Problems of the Aged and Aging, we were able to report that 25 Blue Shield plans in 23 states now enroll persons over 65. In practically all of the other states, medical societies and Blue Shield plans are working out special new programs for the aged. It also was reported that all Blue Shield plans now permit those over 65 to continue their coverage.

In addition, the commercial insurance companies have been making excellent progress during the past year. An increasing number of companies—including many of you represented here today—either have announced new, specially tailored policies for the aged, or you have extended existing policies to more and more states.

We can say with truth and confidence that health insurance coverage for the aged will grow at an accelerated pace in the months ahead. In a conservative estimate based on trends of the recent past, the Health Insurance Association of America predicted earlier this year that 60 per cent of the senior citizens who want it or need it will have protection by the end of 1960. Their further estimates are 75 per cent by 1965 and 90 per cent by 1970. Actually, however, because of the intense interest and activity now centering on this problem, the rate of growth might far exceed those conservative predictions—if medicine and insurance will cooperate in a valiant, all-out effort.


During the next nine months or so many people, including the members of Congress, will be paying close attention to the over-all problems of aging and the aged. And while health insurance coverage for older people is only one phase of this broad subject, it is—from a timely, practical standpoint—the most urgent field of activity.

In my opinion, the medical profession, the prepayment plans and the insurance companies must concentrate, in the months ahead, on the development of voluntary coverage for the aged. We must promote, advertise and publicize new plans and policies. And we must be able to go before the Congressional committee hearings next spring with a real story to tell—a story of dramatic growth in coverage, new ideas and approaches, and hopeful outlook for future progress.

If we make that kind of effort—and if we can present a convincing case to Congress next year—I think we may be able to beat back the advocates of government action. If we do not make that effort, I would hesitate to predict the long-range future of medicine and voluntary health insurance.







when you see  
signs of  
anxiety-tension  
specify

**Dartal<sup>®</sup>** dihydrochloride  
brand of thiopropazate dihydrochloride

*for rapid relief of anxiety manifestations*

You will find Dartal outstandingly beneficial in management of the anxiety-tension states so frequent in hypertensive or menopausal patients. And Dartal is particularly useful in the treatment of anxiety associated with cardiovascular or gastrointestinal disease, or the tension experienced by the obese patient on restricted diet. You can expect consistent results with Dartal in general office practice.

*with low dosage:* Only one 2, 5 or 10 mg. tablet t.i.d. *with relative safety:* Evidence indicates Dartal is not icterogenic.

Clinical reports on Dartal: 1. Edisen, C. B., and Samuels, A. S.: A.M.A. Arch. Neurol. & Psychiat. 80:481 (Oct.) 1958.  
2. Ferrand, P. T.: Minnesota Med. 41:853 (Dec.) 1958.  
3. Mathews, F. P.: Am. J. Psychiat. 114:1034 (May) 1958.

SEARLE

# INDEX FOR VOLUME 55

## AUTHOR INDEX

	Page
<b>A</b>	
Alden, Herbert S. ....	379
Allison, J. R. ....	250
Allison, J. R., Jr. ....	250
<b>B</b>	
Bradley, Edwin ....	127
Buse, John ....	5
<b>C</b>	
Cain, James R. ....	17
Cochran, William N. ....	123
Crawford, R. L. ....	175
<b>D</b>	
Dennis, Edward J. ....	21
Donato, Henry ....	17
<b>E</b>	
Evatt, Clay W. ....	50
<b>F</b>	
Farrior, J. Brown ....	421
Ferrara, Bernard E. ....	178
<b>G</b>	
Geiger, Frank L. ....	396
Greene, Wilson ....	246
Griffin, W. R. ....	290
Groom, Dale ....	19, 59, 100, 130, 185, 222, 246, 253, 294, 348, 395, 439, 473, 483
Guess, J. Decherd ....	218, 263, 343, 386, 432, 469
Gundersen, Gunnar ....	243
<b>H</b>	
Hagerty, Robert F. ....	10
Hamelberg, W. ....	53
Hanckel, R. W. ....	211
Heller, John R. ....	329
Hemphill, Robert W. ....	207
Hester, L. L. ....	290
Hills, A. Gorman ....	79
Hollowell, J. G. ....	335
<b>J</b>	
Jackson, Holland T. ....	1
Jacoby, J. ....	53
<b>L</b>	
Lee, W. H., Jr. ....	10, 427
Lemmon, Gamewell A. ....	457
Levi, Wendell M., Jr. ....	94
Loynd, Harry J. ....	474
Lumpkin, Robert ....	292
<b>M</b>	
Maternal and Child Health Division, State Board of Health ....	286
<b>O</b>	
Orr, Louis M. ....	491

## P

Pacella, Bernard L. ....	41
Parker, Edward F. ....	246
Paul, J. R., Jr. ....	335
Pendergrass, Eugene P. ....	338
Politano, Victor A. ....	417
Pollitzer, R. S. ....	123
Pollitzer, W. S. ....	462
Prevost, Claude T. ....	97, 214
Prioleau, William H. ....	189, 483

## R

Ris, Hugo J. ....	127
Ross, Robert A. ....	283

## S

Sampey, John R. ....	183, 460
Smith, Clara Ravenel ....	255
Smythe, C. M. ....	5
Stallworth, J. M. ....	427
Stephen, C. R. ....	56
Strait, William Frank ....	286
Strom, Carl H. ....	123

## T

Talbert, O. Rhett ....	186
Thrower, Wendell B. ....	455

## W

Waring, J. I. ....	391
Williams, A. V. ....	5
Womack, Nathan A. ....	117
Wyman, Joel W. ....	467

## SUBJECT INDEX

### A

Abstracts of South Carolina Authors .....	4, 60, 78, 101, 114, 197, 203, 221, 262, 266, 289, 297, 349, 440, 459, 466, 478
Accelerated A-V Conduction, (Electrocardiogram of the Month) (Dale Groom) .....	185
Advances in Cancer Control, (John R. Heller) ..	329
[Aging] The Tranquility of the Evening, (Gunnar Gundersen) .....	243
[Ambulances] Mercy Rides 2nd Class .....	199
American Medical Association, House of Dele- gates, Report on Actions, 108th Annual Meet- ing .....	274
Analysis of Replies to Questionnaire concerning Scientific Program, (William H. Prioleau and Dale Groom) .....	483
Anesthesia for the Traumatic Surgical Patient, (C. R. Stephen) .....	56
Announcements .....	31, 67, 112, 137, 194, 235, 277, 308, 358, 404, 447
Anticoagulant Sintrom (Acenocoumarin) in Cor- onary Artery Disease, (Carl H. Strom, William N. Cochran, and R. S. Pollitzer) .....	123

	Page
Aortic Dissection (Dissecting Aneurysm), (Dale Groom, Edward F. Parker and Wilson Greene)	246
B	
Blood Diseases, Malignant, Management of with Compound E39, (John R. Sampey)	460
Blue Cross . . . Blue Shield	30, 109, 198, 278, 307, 357, 444, 482
Burns, Thermal, The Treatment of, (Robert F. Hagerty, and W. H. Lee, Jr.)	10
C	
Cain, Joseph P., Jr.	230
Cancer Control, Advances in, (John R. Heller)	329
Cardiac Resuscitation: a Review and Revision, (W. H. Lee, Jr., and J. M. Stallworth)	427
Cervical Os, Incompetent Internal, (Edward J. Dennis)	21
Changing Image of Medical Care, (Harry J. Loynd)	474
Chemotherapeutic Control of Multiple Myeloma, (John R. Sampey)	183
Child Health Services in South Carolina Since the Survey in 1946, Report on, (J. I. Waring)	391
Chorioadenoma Destruens, (Robert Lumpkin)	292
Colon, Surgical Therapy of Cancer of, (Bernard E. Ferrara)	178
Congress and the Modern Physician, (Robert W. Hemphill)	207
Coronary Artery Disease, The Anticoagulant Sintrom (Aenocoumarin) in, (Carl H. Strom, William N. Cochran, and R. S. Pollitzer)	123
Correspondence	29, 353, 400
Crippled Children Society of South Carolina, Inc., Report of the Executive Director to the State Medical Advisory Committee of the,	411
D	
Deafness, Surgery for, (J. Brown Farrior)	421
Deafness and its Treatment, an Historical Sketch, (R. W. Hanckel)	211
Delinquent, The, (Bernard L. Pacella)	41
Dermatoses, The Treatment of, with Topical Fluoromethalone Alone and in Combination with Neomycin, (Joel W. Wyman)	467
Diabetes Mellitus, Some Problems in, (A. Gorman Hills)	79
Diarrhea, Oral Electrolyte Therapy for, (J. G. Hollowell and J. R. Paul, Jr.)	335
Diphtheritic Myocarditis, (Claude T. Prevost)	97
E	
Education for General Practice, Problems in, (Holland T. Jackson)	1
Effects of Emotion on the ECG, (Electrocardiogram of the Month) (Dale Groom)	59
Electrocardiogram of the Month, (Dale Groom)	19, 59, 100, 130, 185, 222, 253, 294, 348, 395, 439, 473

	Page
Endocardial Fibroelastosis, (Electrocardiogram of the Month), (Dale Groom)	348
Evatt, Clay W.	271
Evolution of Mitral Valvuloplasty, (Wendell B. Thrower)	455
Experiences with the Artificial Kidney, (C. M. Smythe, A. V. Williams, and John Buse)	5
F	
[Fluoromethalone] The Treatment of Dermatoses with Topical Fluoromethalone Alone and in Combination with Neomycin, (Joel W. Wyman)	467
Founders' Day Symposium and Seminar	407
G	
Gall Stones, The Incidence of, (James R. Cain and Henry Donato)	17
Gastro-Intestinal Trichobezoar, (Wendell M. Levi, Jr.)	94
Glaucoma, the General Practitioner, and the Optometrist, (Clay W. Evatt)	50
Greenville County Medical Society—Historical Sketches 1. Antecedents, (J. Decherd Guess)	263
Greenville County Medical Society—Historical Sketches. 2. Greenville's Pioneer Doctors, (J. Decherd Guess)	343
Greenville County Medical Society Historical Sketches. 3. Early Twentieth Century Medicine, (J. Decherd Guess)	386
Greenville County Medical Society Historical Sketches. 4. Medical Greats, (J. Decherd Guess)	432
Greenville County Medical Society Historical Sketches. 5. The Pause Between Two Wars, (J. Decherd Guess)	469
H	
Health Insurance	70
Heart Disease, Traumatic, (Electrocardiogram of the Month), (Dale Groom)	395
[Heart Rupture] Myocardial Infarction with Cardiac Rupture, (Claude T. Prevost)	214
[Hospitals] Hill-Burton Hospital Construction in South Carolina	237
Hospitals, States Rights in,	239
Hypocalcemia (Hypoparathyroidism), (Electrocardiogram of the Month) (Dale Groom)	253
I	
Incidence of Gall Stones, (James R. Cain and Henry Donato)	17
Incompetent Internal Cervical Os, (Edward J. Dennis)	21
[Indigent] New Plans for Care of Charleston County Indigent of Importance Locally and Also to State, (William H. Prioleau)	189
Intussusception of Carcinoma of the Sigmoid through the Anus, (Camewell A. Lemmon)	457
Invasive Mole, (W. R. Griffin and L. L. Hester)	290



	Page
<b>K</b>	
Kettering, Charles F. ....	36
Kidney, Artificial, Experiences with, (C. M. Smythe, A. W. Williams and John Busc) ....	5
<b>Mc</b>	
McClennan-Banks Memorial Hospital .....	280
<b>M</b>	
Management of Malignant Blood Diseases with Compound E39, (John R. Sampey) .....	460
Maternal Mortality Review for 1956, (William Frank Strait and the Maternal and Child Health Division, State Board of Health) .....	286
Maternal and Perinatal Morbidity and Mortality, Socio-Economic Factor in, (Robert A. Ross) ..	283
Mayer, O. B. (silhouette) .....	133
Medical Care, The Changing Image of, (Harry J. Loynd) .....	474
[Medical Care] The Shame of It .....	198
Medical Examiners .....	110
Mitral Valvuloplasty, The Evolution of, (Wendell B. Thrower) .....	455
Mole, Invasive, (W. R. Griffin and L. L. Hester) ..	290
Month in Washington, The .....	109
Multiple Sclerosis (Neurological Conference), (O. Rhett Talbert) .....	186
Myceloma, Multiple, Chemotherapeutic Control of, (John R. Sampey) .....	183
Myocardial Infarction with Cardiac Rupture, (Claude T. Prevost) .....	214
Myocarditis, Diphtheritic, (Claude T. Prevost) ..	97
<b>N</b>	
Naturopathy and an Editor Rear Their Heads ..	240
Needle in the Physician's Office, (Frank L. Geiger) .....	396
Negroes of Charleston, (W. S. Pollitzer) .....	462
[Neomycin] The Treatment of Dermatoses with Topical Fluoromethalone Alone and in Combination with Neomycin, (Joel W. Wyman) ..	467
New Plans for Care of Charleston County Indigent of Importance Locally and Also to State, (William H. Prioleau) .....	189
News .....	32, 63, 110, 135, 193, 234, 271, 306, 354, 401, 445, 486
<b>O</b>	
Observations on Portal Hypertension, (Nathan A. Womack) .....	117
Obstetrician's Responsibility in Perinatal Survival, (J. Decherd Guess) .....	218
Occult Ureteral Injury in Pelvic Surgery, (Hugo J. Ris and Edwin Bradley) .....	127
Old Order Changeth, (Clara Ravenel Smith) ..	255
Oral Electrolyte Therapy for Diarrhea, (J. G. Hollowell and J. R. Paul, Jr.) .....	335
Owens, Frank C. ....	272

	Page
<b>P</b>	
Paroxysmal Atrial Tachycardia with Block, (Electrocardiogram of the Month) (Dale Groom) .....	100, 131
Perinatal Survival, The Obstetrician's Responsibility in, (J. Decherd Guess) .....	218
Perry, William Louis .....	272
Personalities .....	71
Portal Hypertension, Observations on, (Nathan A. Womack) .....	117
Precordial R' Waves, (Electrocardiogram of the Month) (Dale Groom) .....	473
President's Address, (R. L. Crawford) .....	175
President's Page .....	23, 61, 102, 132, 191, 228, 267, 298, 350, 399, 441, 479
Problems in Education for General Practice, (Holland T. Jackson) .....	1
<b>Q</b>	
Questionnaire Concerning Scientific Program, Analysis of Replies to, (William H. Prioleau and Dale Groom) .....	483
<b>R</b>	
Radiation Hazards, Some Considerations of, (Eugene P. Pendergrass) .....	338
Report: Advisory Committee, Medical Standards for Driver Certification .....	28
Report of a Delegate to the AMA .....	104, 304
Research, Medical, Statement on Governmental Support of, .....	107
Reserve Status—National Advisory Committee to the Selective Service System .....	108
Resuscitation, Cardiac: a Review and Revision, (W. H. Lee, Jr., and J. M. Stallworth) .....	427
Retained Juvenile Pattern, (Electrocardiogram of the Month) (Dale Groom) .....	439
Revised Polio Patient Aid Program .....	361
Rudimentary Right Ventricle, (Electrocardiogram of the Month) (Dale Groom) .....	222
<b>S</b>	
Scissorisms .....	76, 204
Shoulder-Hand Syndrome, (W. Hamelberg and J. Jacoby) .....	53
Sigmoid Carcinoma, Intussusception of through the Anus, (Gamewell A. Lemmon) .....	457
Simmons, Elbert Allen .....	71
Sinus Arrest, (Electrocardiogram of the Month) (Dale Groom) .....	130
Socio-Economic Factor in Maternal and Perinatal Morbidity and Mortality, (Robert A. Ross) .....	283
Some Considerations of Radiation Hazards, (Eugene P. Pendergrass) .....	338
Some Problems in Diabetes Mellitus, (A. Gorman Hills) .....	79

	Page
South Carolina Association for Retarded Children, Inc. ....	450
[Southern Pediatric Seminar] The Old Order Changeth, (Clara Ravenel Smith) .....	255
Stress Electrocardiogram (Electrocardiogram of the Month), (Dale Groom) .....	19
Surgery for Deafness, (J. Brown Farrior) .....	421
Surgical Therapy of Cancer of the Colon, (Bernard E. Ferrara) .....	178

## T

[Thrombosis, Coronary] Pathological Conference	223
Tranquility of the Evening, (Gunnar Gundersen)	243
[Trauma] Anesthesia for the Traumatic Surgical Patient, (C. R. Stephen) .....	56
Treatment of Dermatoses with Topical Fluoromethalone Alone and in Combination with Neomycin, (Joel W. Wyman) .....	467
Treatment of Thermal Burns, (Robert F. Hagerty, and W. H. Lee, Jr.) .....	10
Trichobezoar, Gastro-Intestinal, (Wendell M. Levi, Jr.) .....	94

## U

Uncle Sam with a Stethoscope, (Louis M. Orr)	491
[Unwed Mother] Where Can an Unwed Mother Go for Confidential Service? .....	413
Ureteral Injury, Oocult, in Pelvic Surgery, (Hugo J. Ris and Edwin Bradley) .....	127

## V

Ventricular Ectopic Beats, (Electrocardiogram of the Month) (Dale Groom) .....	294
Veritas .....	226
Vesico-Ureteral Reflux in Children: Diagnosis and Management, (Victor A. Politano) .....	417
[Veterans] A Plan of Action to Limit Federal Medical Care of Veterans to Service-Connected Disabilities .....	409

## W

Wallace, W. R. ....	277
Whither Medicine? (Herbert S. Alden) .....	379
Woman's Auxiliary .....	167

## EDITORIALS

The Annual Meeting in May .....	133
Assuaging Aging .....	480
Bleeding and Clotting Times .....	62
On Book Reviews .....	25
Ciba and <i>The Medical Letter</i> .....	269
County Medical Society Officers Meet .....	192
Dancing Mania or Dancing Maniacs? .....	269
Diet for the Pregnant .....	24
Doctor Stokes College .....	24
A Fat-Free Cooking Aid .....	103
Fluo Rides Again .....	400
Forand Bill Only Dormant .....	442

Glaucoma Incidence .....	481
Hiring the Help .....	269
Hot Weather Vapours .....	299
Infections .....	443
Joseph P. Cain, Jr., M. D., President-Elect .....	230
Management of Syphilis .....	24
The Medical Letter .....	103
Mouthings Make Malpractice .....	62
The New Officers .....	231
The 1959 Meeting .....	229
The Nurses Take a Stand .....	442
The O'Driscoll Stories .....	24
Old Age and Survival .....	351
The Open House Abuse .....	134
The Program Committee .....	133
Public Relations Committee .....	351
The Saluda Seminar .....	268
School Boards Recognize Services of Doctors .....	133
Soul Searching .....	352
Systemic Use of Vasoconstrictors in Respiratory Infection .....	400
Togetherness and Wellness .....	25
Tuberculosis Still a Problem .....	268
Words .....	352
Write Your Own Moral .....	299
Yesterday's Recoveries and Today's Cures .....	62

## SOUTH CAROLINA MEDICAL ASSOCIATION

Committee on Infant and Child Health .....	352
Committee Reports 1958-1959 .....	150
Insurance Committee .....	353
Memorial Committee Report .....	232
Minutes of Council Meeting, Columbia, S. C., November 19, 1958 .....	26
Minutes of Council Meeting, Columbia, S. C., February 25, 1959 .....	233
Minutes of Council Meeting, Columbia, S. C., May 12, 1959 .....	301
Minutes of Council Meeting, Columbia, S. C., May 13, 1959 .....	303
Minutes of Council Meeting, Columbia, S. C., May 14, 1959 .....	303
One Hundred and Eleventh Annual Session, South Carolina Medical Association, May 12, 13, 14, 1959 .....	139, 310, 362
Program Speakers .....	144
The School Health Committee of the South Carolina Medical Association .....	270
South Carolina Medical Association Committees, 1959-1960 .....	300

## BOOK REVIEWS

Action of Radiation on Tissues, <i>Cassagne and Gricouloff</i> .....	40
Advances in Electrocardiography, <i>Kossmanu</i> .....	75
The Anatomy of the Nervous System, <i>Ransom</i> .....	202
An Atlas of Normal Radiographic Anatomy, <i>Meschan</i> .....	397

	Page		Page
Atrial Arrhythmias, Digitalis and Potassium, Lown .....	282	The Plasma Proteins, Weil .....	240
Biosynthesis of Terpenes and Sterols, Wolstenholme and O'Connor .....	240	Poisoning, von Oettingen .....	73
The Birth of Normal Babies, Streat .....	203	Practical Dermatology, Lewis .....	203
Callander's Surgical Anatomy, Anson and Mad-dock .....	75	Practical Leads to Puzzling Diagnosis: Neuroses that Run Through Families, Alvarez .....	397
The Care of the Geriatric Patient, Cowdry .....	201	Preventive Medicine, Hilleboe and Larimore .....	452
Childbearing Before and After 35, Bleyer .....	242	Principles of Disability Evaluation, Smith .....	411
Clinical Obstetrics and Gynecology .....	454	Psychopathology of Communication, Hoch and Zubin .....	74
Cold Injury, Ground Type, Whayne and De-Bakey .....	74	Psychoprophylactic Preparation for Painless Childbirth, Bonstein .....	38
Convulsive Disorders of Children, Hsi-Chih-Chao, Druckman and Kellaway .....	75	Regional Ileitis, Crohn and Yarnis .....	73
Correlative Neuroanatomy and Functional Neu-rology, Chusid and McDonald .....	39	Rehabilitation in Industry, Covalt .....	40
Counterfeit-Sex; Homosexuality, Impotence, Frigidity, Bergler .....	113	Squint and Allied Conditions, Guibor .....	309
Current Therapy—1959, Conn .....	202	Symposium on the Cerebral Fluid, O'Connor and Wolstenholme .....	39
Diabetes as a Way of Life, Danowski .....	38	Textbook of Pediatrics, Nelson .....	454
Diagnostic Laboratory Hematology, Cartwright .....	38	Theory and Problems of Child Development, Ausubel .....	113
Difficult Diagnosis, a Guide to the Interpreta-tion of Obscure Illness, Roberts .....	201	Trauma, McLaughlin .....	454
Diseases of Children in the Subtropics and Tropics, Trowell and Jelliffe .....	242	Treatment in Internal Medicine, Hyman .....	201
Diseases of the Colon and Rectum, Turell .....	202	Vascular Surgery, deTakats .....	452
Diseases of the Esophagus, Terracol and Sweet .....	39	What We Do Know About Heart Attacks, Gof-man .....	72
Diseases of Metabolism, Duncan .....	452		
A Doctor Remembers, Richardson .....	309		
Electrocardiogram, Bernreiter .....	72		
Elementary Statistics with Applications in Medi-cine and the Biological Sciences, Croxton .....	452		
Emergency War Surgery NATO Handbook .....	73		
The Essence of Surgery, Welch and Powers .....	39		
The Functional Organization of the Diencep-halon, Hess .....	203		
General Urology, Smith .....	240		
Ideals in Medicine—a Christian Approach to Medical Practice, Edmunds and Scorer .....	74		
Industrial Carcinogens, Eckardt .....	452		
Leukemia, Dameshek and Gunz .....	242		
Long-Term Illness, Wohl .....	200		
Maternity, Goodrich .....	240		
Moloy's Evaluation of the Pelvis in Obstetrics, Steer .....	451		
New and Non Official Drugs .....	203		
Pediatric Neurology, Lamm .....	202		
Physical Dynamics of Character Structure, Lowen	75		

## DEATHS

Bates, Charles Oscar .....	448
Carpenter, William McNeill .....	168
Chandler, Maj. F. W. ....	449
Dickson, G. L. ....	168
Finklea, Orion T. ....	113
Gamble, E. Beasley .....	358
Graham, J. J. ....	404
Holmes, Hal B. ....	72
Moorer, W. M. ....	72
Peebles, Johnston .....	197
Ryan, W. B., Jr. ....	237
Sample, J. L. ....	168
Scott, C. M. ....	277
Scott, James Edward .....	309
Sherard, Stewart .....	113
Smith, C. D. ....	113
Thomason, E. H. ....	197
Thomason, J. A. ....	449
Watson, Walter H. ....	404
White, Joseph Warren .....	404
Willcox, J. M. ....	72
Wilson, I. Ripon .....	277





SOUTH CAROLINA STATE NUTRITION  
COMMITTEE

Composed of Representatives of State Organizations  
and Agencies

Working on a Coordinated Food and Nutrition  
Program

EXTENSION AND AMENDMENT OF  
PUBLIC LAW 480

September 1959

SEC. 201. (a) In order to insure the nutritional value of cornmeal, grits, and white flour when such foods are made available for distribution under section 416(3) of the Agricultural Act of 1949 or for distribution to schools under the National School Lunch Act or any other Act, such foods shall be enriched so as to meet the standards for enriched cornmeal, enriched corn grits, or enriched flour, as the case may be, prescribed in regulations promulgated under the Federal Food, Drug, and Cosmetic Act; and in order to protect the nutritional value and sanitary quality of such enriched foods during transportation and storage such foods shall be packaged in sanitary containers. For convenience and ease in handling, the weight of any sanitary container when filled shall not exceed fifty pounds.

(b) The term "sanitary container" means any container of such material and construction as (1) will not permit the infiltration of foreign matter into the contents of such container under ordinary condi-

tions of shipping and handling, and (2) will not, for a period of at least one year, disintegrate so as to contaminate the contents of the container, necessitating the washing of the contents prior to use.

TO MEMBERS AND FRIENDS OF THE COMMITTEE:

Rice was singled out as the only staple grain food that will not be distributed in sanitary packages or nutritionally improved by enrichment. Corn meal, corn grits, and wheat flour will all be distributed in sanitary packages and enriched, but rice will not. This was the final action taken by Congress before adjournment a few days ago.

Rice was stricken from the bill over the objection of United States Senator Olin D. Johnston who introduced the bill as a step toward improvement of the nutritional quality of school lunches. In the South where rice is consumed in large quantities it is predicted that school lunch supervisors and others in charge of mass feeding will use less rice. During the hearings in Washington, testimony showed that rice in burlap sacks was contaminated during transportation and storage. Undisputed testimony showed that rice needed enrichment fully as much as flour, grits and corn meal.

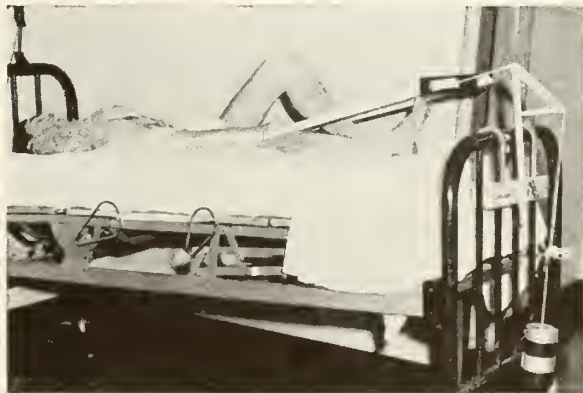
While we have reason to be proud of our accomplishments we must recognize that this project is not fully completed. A copy of the action taken by Congress follows for your information.

D. W. Watkins, Chairman  
S. C. State Nutrition Committee

*An improved method of  
pelvic traction therapy  
for LOW BACK SYNDROME  
... at home or hospital*

FOR MEN, WOMEN and CHILDREN

**CAMP-VARCO**  
PELVIC TRACTION BELT



**Indicated in:** 1. "Slipped Disc." 2. Sprain of lower back. 3. Osteoarthritis of lower back. 4. Acute scoliosis. 5. Fracture of lumbar vertebrae or processes. 6. Myositis, fibrositis, fascitis of lower back. 7. Simple fractures of pelvic bones. **advantages:** 1. Effective traction. 2. Early relief from pain. 3. Permits proper nursing. 4. No complications. 5. No contra-indications. 6. Easily applied. **avoids:** 1. Prolonged disability. 2. Quadriceps atrophy. 3. Dermatitis from adhesives. 4. Swollen ankles and knees. 5. Thrombophlebitis. 6. Decubitus Ulcers. 7. Patient irritation.

*You'll find this new Camp development immediately available from our complete stock of Camp supports. Complete instructions with every belt. Order by hip size.*



**W i n c h e s t e r**

CAROLINAS HOUSE OF SERVICE



**Winchester Surgical Supply Co.**  
119 East 7th St. Tel. 2-4109 Charlotte, N.C.

**Winchester-Ritch Surgical Co.**  
421 W. Smith St. Tel. 5656 Greensboro, N.C.

## for therapy of overweight patients

• d-amphetamine  
*depresses appetite and elevates mood*

• meprobamate  
*eases tensions of dieting*  
(yet without overstimulation, insomnia  
or barbiturate hangover)

# BAMADEx<sup>®</sup>

MEPROBAMATE WITH D-AMPHETAMINE SULFATE LEDERLE

is a logical combination in appetite control

Each coated tablet (pink) contains meprobamate, 400 mg.; d-amphetamine sulfate, 5 mg.  
Dosage: One tablet one-half to one hour before each meal.



LEDERLE LABORATORIES

A Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

## ESTES SURGICAL SUPPLY COMPANY

Phone WALnut 1700-1701

56 Auburn Avenue

ATLANTA, GA.

## ADVERTISERS

Ames Company  
Appalachian Hall  
Armour Company  
Benton Laboratories  
Blue Shield  
Brawner's Sanitarium  
Bristol Laboratories  
Burroughs-Wellcome & Co.  
Coca-Cola Company, The  
Davies, Rose & Co., Ltd.  
Drug Specialties  
Eli Lilly & Company  
Estes Surgical Supply Co.  
Fesler Co.  
Highland Hospital  
Irwin, Neisler & Co.  
Jones & Vaughan, Inc.  
Kent Cigarettes  
Lederle Laboratories  
Mayrand, Inc.  
Medical College of Georgia  
Merch, Sharp & Dohme  
Parke, Davis & Company  
Pfizer Laboratories  
Physicians Casualty Company  
Pinebluff Sanitarium  
Professional Management South  
Riker Laboratories, Inc.  
J. B. Roerig & Co.  
Sandoz Pharmaceuticals  
Schering Corporation  
Sealy, Inc.  
G. D. Searle & Co.  
Smith-Dorsey  
Smith, Kline, & French  
St. Paul Fire & Marine Ins. Co.  
United States Brewers Foundation  
Wallace Laboratories  
Waverley Sanitarium, Inc.  
Wesson Oil & Snowdrift Sales Co.  
Westbrook Sanatorium  
Winchester Surgical Supply Co.  
Winthrop Laboratories, Inc.  
World Insurance Co.

## WAVERLEY SANITARIUM, INC.

(FOUNDED IN 1914 BY DR. AND MRS. J. W. BABCOCK)

HOSPITAL CARE AND TREATMENT OF NERVOUS AND MENTAL DISORDERS  
ADMISSIONS LIMITED TO WHITE WOMEN  
SPECIALIZING IN SHOCK THERAPY

INCLUDES OUT-PATIENT DEPARTMENT FOR BOTH SEXES

DR. CHAPMAN J. MILLING, MEDICAL DIRECTOR

DR. JAMES B. GALLOWAY — DR. PENROD G. HEPFER

SENIOR ASSISTANT PHYSICIANS

FOR RESERVATION CALL  
SUPERINTENDENT 2-4273

2641 FOREST DRIVE  
COLUMBIA, S. C.

FIRE SPRINKLER SYSTEM THROUGHOUT HOSPITAL















